

special edition newsletter 2021

Dr. Saniya Ossikbayeva of the Molecular Genetic Research Center at KazlOR isolates DNA from cancer patients to detect for mutations

Celebrating 20 Years of Scientific Collaborations



7500+

CANCER PROFESSIONALS ENGAGED

50+

VIRTUAL EVENTS HOSTED

15+

COUNTRIES REPRESENTED

FROM THE EXECUTIVE DIRECTOR

Dear Readers,

As we look back on 2020—a year of immense challenges and heartache—I want to express my deep gratitude for AECA organizational partners and clinical experts worldwide for their continued support of our work and mission. Meetings may have looked a little different, collaboration may have shifted from inperson to virtual, but I'm proud of the impact we've been able to make together.

At the center of our efforts, we recognize why we do this work to improve the quality-of-life and treatment outcomes for millions of people who will battle cancer each year. Throughout the majority of 2020 and into 2021, COVID-19 posed particular challenges for cancer patients and their caregivers. Aside from the isolation and loss of normalcy that we all grappled with, this community may have been managing canceled chemotherapy or surgery appointments, increased challenges acquiring necessary medication, or heightened fear of the virus due to immunosuppression. There has never been a more important time to support this vulnerable population.

Despite the disruption caused by the pandemic, the global cancer control community has adapted brilliantly, and we've seen several positive byproducts of the shift to virtual, including 1) increased level of collaboration; where discussions may have centered around few conferences per year, conversations are now continuous and producing greater scientific value, 2) lower cost of administrative and travel resources, encouraging the participation of organizations that may not have had the means to partake previously, and 3) AECA's ability to expand its programmatic focus due to streamlining of resources, which has helped identify synergies across work streams and new avenues for international collaboration.

AECA's strategy for scientific advancement has been spreading throughout the Eurasian region, with tumor board sessions, teachthe-teacher educational experiences, scientific exchanges, and public health policy discussions being held continuously over the past year. Across all cancer sites, with particular focus on gynecological cancer, urological cancer, and palliative care, AECA has prioritized connecting North American and Eurasian leaders to advance the research and treatment of these malignancies for communities around the globe. To highlight the tangible successes of ongoing partnerships and collaboration in the region, AECA has begun to capture a growing list of meeting abstracts and peer-reviewed scientific publications from participating organizations that result from bilateral relationships developed by AECA.



We encourage you to visit our website to see the tremendous strides we've made in pushing the global oncology community forward.

Throughout our tenure, AECA has strategically aligned our activities with priorities put forth by the World Health Organization (WHO) to ensure regional efforts mirrored those globally. For many years this was focused on tobacco control as a leading cause of cancer; AECA and partners encouraged major policy adoptions in the Russian Federation and forged critical connections between U.S. and Russian cancer centers to examine and coordinate key areas of tobacco-related research on behalf of NIH Fogarty. Later, this priority shifted to cancer screening; AECA facilitated the establishment the Eurasian Cancer Screening Congress in 2018 and made certain that screening topics were not only included in national cancer control plans, but evaluated for effectiveness and prioritization. These plans were later bolstered by international experts, highlighted through a Kazakhstan case study featured by WHO, touting that screening coverage had increased from 60% to 90% for breast and cervical cancer.

More recently, WHO announced the launch of a global strategy to accelerate the elimination of cervical cancer, which AECA promptly shared with its global scientific network. AECA has been addressing this issue for decades, working as a close partner of the U.S. National Cancer Institute (NCI) and International Gynecologic Cancer Society (IGCS) to help reduce the global burden of cancer. Preempting this WHO announcement, AECA had been working with Uzbekistan gynecological leaders to ensure the success of an HPV vaccination campaign in 2019 to educate the population on the cancer prevention resource and to ensure girls across all regions received the required HPV vaccinations. Just a few months ago, WHO also updated their classification of cervical tumors, which were launched at the IGCS Congress based out of Russia. As always, AECA distributed this vital information to relevant Eurasian stakeholders, ensuring the global pathology community had the latest resources to inform research efforts and clinical care. AECA will continue to work with gynecological leaders across Eurasia and North America to ensure scientific progress is made toward reducing women's cancers.

PARTNER PUBLICATIONS

100+ PARTICIPATING RESEARCH ORGANIZATIONS

> 70+ SCIENTIFIC TOPICS PUBLISHED

Looking onward into 2021, while we hope to be celebrating soon the widespread distribution and uptake of COVID-19 vaccines, AECA will also be celebrating its 20th year pursuing knowledge exchange and scientific excellence in cancer control. It is incredible to see all of the hard work we've done over the last two decades come to fruition and lead to substantial scientific discovery, and we're excited to see what additional advancements we'll be able to unveil in the coming months. This year, we hope to welcome new partners into the AECA network and continue to expand our portfolio into additional cancer sites and geographic locations. We look forward to continuing to share our successes with our invaluable network of individuals and organizations around the world.

Wishing you health and happiness in 2021 and beyond.

Sophia Michaelson

Sophia Michaelson, PhD



SCIENCE

After more than two decades of ardent endeavors to reduce the global burden of cancer, AECA and its partner have seen tremendous scientific breakthroughs as a result of robust international collaboration. In preparation for the AECA's 20th anniversary, meeting abstracts and peer-reviewed journal publications were collected to highlight the tangible impact that partners had a result of AECA's coalitionbuilding efforts between North America and Eurasian stakeholders. In just the last two years, nearly two hundred scientific contributions were presented and discussed among the global oncology community.

Example Collaborative Partner Publication

Intracardiac Intravenous Leiomyomatosis: Diagnosis and Management

Through a close partnership forged between the Blokhin National Medical Research Center (Russia) and MD Anderson Cancer Center (USA), clinical researchers presented treatment strategies for patients requiring complex and multidisciplinary surgery for intravenous leiomyomatosis with intracardiac extension, a rare condition characterized by growth of a uterine neoplasm that extends through the uterine vascular channels, through the venous system, and ultimately into the cardiac chambers. The tumors may lead to significant physiologic disturbances and heart failure. It commonly occurs in pre-menopausal women and approximately 83% have undergone a previous hysterectomy or myomectomy. By outlining the details on management strategies in Russia through a peer-reviewed publication in the *International Journal of Gynecological Cancer*, clinicians around the world can bring these lessons learned into their treatment of this population.

Through close collaboration with the U.S. National Cancer Institute (NCI) for nearly 15 years, AECA helped develop critical connections between premier cancer centers throughout the U.S. and abroad. This effort led to multiple research initiatives between NCI and Eurasian institutions, most notably several U.S.-Russia bilateral collaborative partnerships that were established in 2017. Examples of the research projects which led to published literature and patented inventions include:

- Fox Chase Cancer Center partnered with Lomonosov Moscow State University to investigate mechanisms of PARP-1 interaction with chromatin
- Memorial Sloan Kettering Cancer Center and the Burdenko Neursurgery Research Institute worked on the identification of essential areas of the brain in pre-operative brain tumor patients using BOLD fMRI and independent physiological parameters
- Harvard Medical School joined Saint-Petersburg State University to perform a single-cell analysis of tumormicroenvironment interactions in follicular lymphoma
- Vanderbilt University collaborated with the International Tomography Center of the Russian Academy of Sciences on magnetic resonance spectroscopy and molecular imaging of metabolic pathways in cancer







- The Lancet Oncology: Epacadostat plus pembrolizumab versus placebo plus pembrolizumab in patients with unresectable or metastatic melanoma
- The New England Journal of Medicine (NEJM): <u>Atezolizumab plus Bevacizumab in Unresectable</u> <u>Hepatocellular Carcinoma</u>
- The Journal of the American Medical Association (JAMA): Effect of Doxorubicin Plus Olaratumab vs Doxorubicin Plus Placebo on Survival in Patients with Advanced Soft Tissue Sarcomas
- Cancer: <u>A multicountry assessment in Eurasia</u>: <u>Alignment of physician perspectives on palliative care</u> <u>integration in pediatric oncology with World Health</u> <u>Organization guidelines</u>
- Nature: Protein-altering germline mutations implicate novel genes related to lung cancer development

AECA and its organizational partners routinely participate in and contribute to global oncology conferences, including those hosted by the American Society of Clinical Oncology (ASCO), European Society for Medical Oncology (ESMO), and the Union for International Cancer Control (UICC). For example, several Eurasian-led abstracts shared at the 2020 Annual ASCO Meeting were featured in the *Journal of Clinical Oncology*, with topics including a phase II pilot study of the efficacy and safety of nivolumab and ipilimumab in T1aN0M0 renal cell carcinoma patients ineligible for surgical treatment, efficacy and safety of lenvatinib in combination with everolimus in metastatic renal cell carcinoma resistant to antiangiogenic targeted therapy, and next generation sequencing analysis of key genes in breast cancer patients, among others.

Last year, tremendous strides were also made in the field of palliative care. From large scientific summits, such as the Development of Palliative Care for Adults and Children Conference co-organized by AECA to more pointed ventures, like webinars focused on the principles of pain therapy in oncology, neuropathic pain, dose titration, among other topics, all serve as foundational elements for one purpose: scientific research. Ongoing cooperation between U.S. and Eurasian palliative care leaders led to the establishment of a minimum data set to facilitate health services research that will allow for a complete picture of how hospice and palliative care is delivered throughout the Eurasian region, creating a new global research platform in a rapidly growing palliative care landscape. This data includes routine and systematic measurement of information on patient demographics, type of care received, provider details, and cost and quality of care. Simultaneously, solid structures are being developed to conduct research projects and clinical trials on new methods for treating patients and families with both medical and psychosocial care. With nearly 80% of U.S. patients who are hospitalized for serious illness having access to palliative services, research in developing regions offers the opportunity to identify treatment strategies that improve on practices already established. A number of scientific papers are in development that will contribute to the body of knowledge on palliative care globally.

AECA continues to focus on expanding efforts with both global engagements and more targeted dialogs to ensure knowledge transfer among the appropriate stakeholders not only takes place, but is implemented in cancer control plans, scientific research agendas, and clinical practice. Looking into 2021, AECA will expand its portfolio to encompass skin cancer and melanoma, while also building on the stronghold on reproductive cancers and palliative care education and research already underway and flourishing within the Eurasian region. While the commitment to advance scientific research that will benefit the global oncology community remains as strong as ever, AECA will also continue to prioritize educational opportunities that will support young professionals and ensure regional scientific accomplishments are disseminated to the global community.

EDUCATION

While the extent of the scientific accomplishments over the last year were great, AECA maintains focus on the foundation of those accomplishments – educational opportunities. From identifying topical areas to improve knowledge transfer among stakeholders, to utilizing digital platforms to quickly connect leaders across the globe, the Alliance and its organizational partners are making tremendous strides in training the next generation of scientists, surgeons, and clinicians, ultimately creating a more conducive context for joint scientific cooperation.

For over two decades, AECA has optimized global platforms to engage professional oncology communities. AECA draws regional attention to distinguished events, fosters connections between relevant attendees, and organizes special sessions to further bring value to international meetings.

> Based on global and organizational oncology priorities, AECA elected to co-host several events in 2020, including the

> > Development of Palliative Care for Adults and Children Conference, the International Gynecologic Oncology Virtual Congress, and the International Conference on Cancer Care in Kazakhstan. Through these channels, AECA was able to propose world-renowned speakers and drive collaboration on surgical techniques, scientific exchange, and other educational opportunities.

In addition to playing a leading role at international events, AECA also prioritized strengthening more targeted, ongoing collaboration between cancer control specialists. Building on previous success facilitating virtual exchanges, 2020 brought the most sweeping AECA developments of the international tumor board platform. Uzbekistan, Belarus, Kazakhstan, and Russia all arranged to meet

monthly with U.S. and European representatives to discuss gynecological and urological cancer control topics, ensuring medical professionals in both regions are addressing cancers of the reproductive region more holistically. Monthly meetings were also established to connect pathology experts, which helped forge a gynecological pathology virtual platform – led by Dr. Anna Plotkin of the University of Toronto – featuring recorded lectures and downloadable pathology resources categorized by disease site, summaries of relevant papers, commonly used gynecologic oncology stains, and direct access to the larger pathology community from Eurasia and other countries.



Ongoing efforts to improve cancer care in Eurasia allowed AECA to be able to establish the infrastructure necessary to sustain an early career research and publications network within the region. The network provides early career professionals with a supportive group of international peers and mentors to discuss research, publishing, and writing as critical components to career development. This effort ensures that research that is of value to the global cancer community will be accepted into prominent scientific journals and made available to intentional stakeholders who may benefit from the novel insights.



Delving even further into more personalized educational experiences, several palliative care "Teach the Teacher" courses were conducted last year. After two years of diligent work and ongoing engagement between AECA, the Worldwide Hospice Palliative Care Alliance (WHPCA), WHO, U.S. institutions, and Russian representatives, an educational course on palliative care for faculty of seven Russian higher education institutions was launched in November 2020.

The course provided educational professionals with guidance on how and what to teach emerging palliative care specialists, thus ensuring that best practices in palliative care research and treatment are implemented. AECA-affiliated faculty from Harvard, Johns Hopkins, Fox Chase Cancer Center and WHPCA presented on a number of topics, including grief and bereavement, patients with refractory dyspnea, neurobiology of pain, and life-sustaining treatment. Following advocacy from AECA and other organizations, it was decided that the event will be hosted on an annual basis under the auspices of WHO, given the increasing use of palliative care in developing nations and the opportunity to identify collaborative research synergies through the engagement. AECA is proud to have been a part of this effort, as the Alliance believes that improving educational curriculum for up-and-coming clinicians and policy leaders is key to making substantive change in palliative care practice.

Additionally, AECA is part of the international team coordinating regular palliative care case conferences where experts discuss clinical instruction on the management of patients suffering from complex pain syndromes, psychosocial problems, management of shortness of breath, and other hard to manage symptoms. This effort has resulted in the creation of a case library that professionals can access at any time, vastly improving access to these vital discussions both now and for future U.S. and Eurasian clinicians.

This year, AECA will continue to expand educational opportunities throughout the Eurasian region, both by cancer site and geographic representation. Plans are in development for a new educational webinar series focused on melanoma and skin cancer, with more details on that engagement forthcoming. AECA will also continue to invite new partners to optimize current platforms for additional engagement. For example, Eurasian stakeholders from multiple countries will be invited to a webinar series currently hosted between the U.S. and one Eurasian nation, in order to increase efficiency in information dissemination and identify opportunities for cooperation across the entire Eurasian perimeter.



educational event alongside AECA clinical experts from Johns Hopkins University, Harvard University, and the Hospice Care Professionals Association

AECA - 20 YEARS OF PROGRESS (2001-2021)

AECA has been at the forefront in driving global improvement in oncology research, education, and training efforts for twenty years, always with one thing in mind: improving the quality-of-life and health outcomes for the millions afflicted each year with life-threatening malignancies. While the snapshots below depict dramatic gains the international cancer control community has made, each individual effort is the result of multi-year, multi-institution collaboration. AECA will build on the successes over the last two decades by leveraging the strong relationships developed between North American and Eurasian researchers and institutions. There has never been more opportunity to make lasting, global change in scientific research, clinical care, public health programs, and policy priorities as it relates to cancer care. AECA is thrilled to be part of this work, and we look forward to developing new advances in the next twenty years.

2001-2003

Launched the AECA program focused on the most prevalent U.S.-Eurasia cancer sites, establishing multidisciplinary cancer management programs through clinical summits focused on gynecology, urology, head and neck, lung, gastrointestinal, and skin cancers. Fostered cooperation between clinical experts and partnering organizations to elevate and sustain joint research projects.



Optimized research infrastructure development for cancer imaging and therapy by establishing a multi-national Eurasian scientific network; supported novel radio-immunotherapy research between Russia and the U.S. in order to develop radiopharmaceuticals for the detection and treatment of cancer.





2005-2006

Initiated public health programs and synchronized partners' priorities to align with the WHO agenda. While early cancer control efforts focused on detection and treatment, increased emphasis on prevention was the catalyst to the launch of a global tobacco control movement. AECA supported national events throughout Eurasia which encouraged several countries to adopt tobacco control policies, including smoke-free public zoning, direct advertising bans, and strict package labeling requirements.





2007-2008

Engaged all levels of Eurasian oncology services to introduce comprehensive cancer prevention and management programs that combined both cancer prevention and treatment techniques, while simultaneously expanding scientific networks and research platforms across all cancer sites.



Utilized international venues to showcase Eurasian clinical and scientific accomplishments, peer reviewed publications, and research capacity. Unified Eurasian partners around global cancer control efforts by encouraging participation in large-scale evens hosted by organizations such as the Union for International Cancer Control (UICC), European Society for Medical Oncology (ESMO), American Society of Clinical Oncology (ASCO), International Agency for Research on Cancer (IARC), and more.



2010-2011

Launched multi-national "For Healthy Life" noncommunicable disease (NCD) prevention program following the United Nations General Assembly High-Level Meeting on NCDs and aligned with the 2008-2013 World Health Organization (WHO) Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases.



The U.S. National Cancer Institute (NCI) Center for Global Health (CGH) invited AECA to lead research, clinical, and policy efforts in Russia on behalf of CGH and other U.S. comprehensive cancer centers. AECA leveraged strong relationships with North American and Eurasian cancer control experts to spur scientific innovation.

2011-2012



2012-2013

Incorporated palliative care research, education, and clinical care into efforts to improve end-of-life programs and policies for cancer patients.













Expanded CGH focus from exclusively the Russian Federation to a larger territorial perimeter, including Central Asian Caucuses, Eastern European, and Baltic countries. On behalf of CGH, led regional efforts in the region on cancer prevention, symptom management, and palliative care.





2015-2016

Provided technical assistance to Central Asian nations during the development and implementation of national cancer controls plans. Stakeholders presented plans at the 2015 Cancer Control Leadership Forum in Uzbekistan, receiving feedback from international experts which AECA helped to not only incorporate into plans, but ensured the execution of these plans throughout the Eurasian region.

ADIOR

Tuice

International Cancer Gontrol Leadership Forum in Central Asia Markaziy Osiyoda Saratonga qarshi Kurash boʻyicha Xalqaro Forum Международный Форум Лидеров Противораковой Борьбы в Центральной Азии October 14-16, 2015 - Tashkent, Uzbekistan

2016-2017

CANCER SCRE

ENCE V 2018 NG

Coordinated the first bilateral extramural cancer research cooperation between the U.S. National Cancer Institute (NCI) and the Russian Foundation of Basic Research which resulted in ten scientific grants; multi-year projects have produced publications and patents of interest to the global cancer community.





Partnered with leading North American comprehensive cancer centers and international societies to support Eurasian initiatives in cancer screening. AECA developed initiatives to support the launch of WHO cancer screening guidelines in cervical, prostate, breast, and colon cancer to more than 20 countries at the Eurasian Cancer Screening Congress.

NTERNATIONAL CONGRESS



STATEST

2018-2019

Initiated gynecological tumor boards and clinical case reviews between leading U.S., Russian, Central Asian, and Eastern European cancer centers. Dramatic advancements in gynecological cancer research, prevention, screening, and treatment throughout Eurasia, due in part to decades of AECA effort in the region, encouraged the Russian Federation to join the International Gynecologic Cancer Society (IGCS) Strategic Alliance Partnership Program.



2019-2021

Embraced virtual platforms to continue developing new international programs and partnerships, while addressing COVID-19 challenges. AECA coordinating center, Fox Chase Cancer Center, published clinical guidelines for cancer care during the pandemic, which was promptly shared with international partners to provide the most up-to-date guidance with the scientific community. Simultaneously, AECA, the Worldwide Hospice Palliative Care Alliance, and the Russian Association of Hospice Care Professionals mobilized efforts to develop pandemic recommendations for the palliative care space, which were distributed in both English and Russian.



OUR MISSION

To pool the intellectual and scientific resources of member institutions to further research and discovery in cancer prevention, treatment strategies, and palliative care.

STRENGTHENING GLOBAL CANCER RESEARCH

AECA is a scientific facilitator in Eurasia, adept at securing resources to strengthen cancer research through engagement with Ministries of Health, leaders of research institutes, and other regional decision makers. AECA programs focus on enhancing the understanding of the biology and etiology of cancer, implementing effective strategies for prevention, and developing new approaches for detection and treatment.

PROMOTING RESEARCH TRAINING AND EDUCATION

AECA has effectively facilitated research training delivered through highquality, multidisciplinary professional courses designed to enhance knowledge and skills. Primary areas of international education exchange include urologic and gynecologic oncology, hematology, radiation oncology, pathology, immunotherapy, cancer prevention, palliative care, and pediatric cancers.

TRANSLATING RESEARCH INTO POLICY AND PROGRAMS

AECA, together with international partners, leads cancer control activities in Eurasia by providing guidance on existing practices to inform policy and strengthen research capacity, stimulate partnerships, and contribute to successful implementation of cancer control plans. AECA's active engagement in Eurasia has and continues to ensure that research results are translated into policies and programs that help all people live longer and healthier lives.

AECA Coordination Office

Fox Chase Cancer Center • 333 Cottman Avenue, Philadelphia, PA 19111 • +1-215-728-3800

www.theaeca.org





AECA PARTNER PUBLICATIONS AND MEETING ABSTRACTS 2019-2021

Since its inception, AECA has fostered collaboration between North American and Eurasian cancer control stakeholders, which has stimulated international scientific research agendas and led to oncology advancements which have improved patient wellbeing. Global leaders are often motivated to engage in collaborative partnerships in order to gain access to specialized equipment, tap into new sources of funding, or exchange innovative ideas; always with the ultimate goal to develop novel diagnostic and treatment techniques to improve cancer care. AECA helps navigate the political, logistical, and cultural barriers that can deter these fruitful efforts.

Scientific publications can serve as a concrete byproduct of the productive relationships AECA has established within the global oncology field. In the spirit of increasing the visibility of pioneering research conducted by AECA clinical experts or through AECAestablished working groups, selected publications and conference abstracts by collaborators from Russia, Uzbekistan, and Kazakhstan have been compiled. AECA is working closely with other country representatives throughout the Eurasian perimeter to introduce additional accomplishments.

FEBRUARY 2021

February 2021; The Lancet Oncology

Comparison of breast cancer and cervical cancer stage distributions in ten newly independent states of the former Soviet Union: a population-based study

Author-affiliated institutions include: International Agency for Research on Cancer (France), WHO Regional Office for Europe (Denmark), Tampere University (Finland), National Institute of Health (Armenia), Republican Specialized Scientific Practical Medical Center of Oncology and Radiology (Uzbekistan), Institute of Oncology (Moldova), P A Hertsen Moscow Oncology Research Center (Russia), Kazakh Institute of Oncology and Radiology (Kazakhstan), National Center for Disease Control and Public Health (Georgia), National Center of Oncology (Azerbaijan), National Cancer Registry (Ukraine)

February 2021; Journal of Cancer Education

Patterns of Care and Barriers to Utilization of Definitive Concurrent Chemoradiation Therapy for Stage III Non-Small Cell Lung Cancer in Russia

Author-affiliated institutions include: Ulyanovsk Regional Cancer Center (Russia), Knight Cancer Institute (USA), Hadassah Medical (Russia), Russian Society of Clinical Oncology (Russia), N.N. Blokhin Russian Cancer Center (Russia)

February 2021; Human Molecular Genetics

Sexual Dimorphism in Cancer: Insights from Transcriptional Signatures in Kidney Tissue and Renal Cell Carcinoma

Author-affiliated institutions include: International Agency for Research on Cancer (France), Max Planck Institute for Demographic Research (Germany), Palacky University (Czech Republic), N.N.Blokhin Cancer Research Centre (Russia), National Institute of Public Health (Romania), Nofer Institute of Occupational Medicine (Poland), International Organisation for Cancer Prevention and Research (Serbia)

JANUARY 2021

January 2021; International Journal of Molecular Sciences

CHID1 Is a Novel Prognostic Marker of Non-Small Cell Lung Cancer

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center of Oncology (Russia), Moscow State Academy of Veterinary Medicine and Biotechnology (Russia)

January 2021; Frontiers of Optoelectronics

New approaches to diagnostics and treatment of cholangiocellular cancer based on photonics methods

Author-affiliated institutions include: Russian Academy of Sciences (Russia), I.M. Sechenov First Moscow State Medical University (Russia)

January 2021; Bulletin of Experimental Biology and Medicine

The Role of *ESR1* Gene Polymorphic Markers in the Development of Breast Cancer and Resistance to Tamoxifen Therapy

Author-affiliated institutions include: I. M. Sechenov First Moscow State Medical University

(Russia), N. M. Emanuel Institute of Biochemical Physics (Russia), N. N. Blokhin National Medical Research Centre of Oncology (Russia)

January 2021; Amino Acids

Plasma pharmacokinetics and tissue distribution of L-lysine α-oxidase from *Trichoderma* cf. *aureoviride* RIFAI VKM F- 4268D in mice

Author-affiliated institutions include: N.N. Blokhin Cancer Research Center (Russia), I.M. Sechenov First Moscow State Medical University (Russia), G.K. Skryabin Institute of Biochemistry and Physiology of Microorganisms (Russia)

January 2021; Cancer Genetics

Microarray-based analysis of the *BRAF* V600 mutations in circulating tumor DNA in melanoma patients

Author-affiliated institutions include: Russian Academy of Sciences (Russia), N.N. Blokhin Cancer Research Center (Russia)

January 2021; *Opuholi Golovy Sei* **Does morphology have real impact on local and distant recurrences in head and neck cutaneous melanoma?** Author-affiliated institutions include: N.N. Blokhin Cancer Research Center (Russia)

January 2021; Gynecologic Oncology

Live births and maintenance with levonorgestrel IUD improve disease-free survival after fertility-sparing treatment of atypical hyperplasia and early endometrial cancer

Author-affiliated institutions include: P. Hertsen Moscow Oncology Research Institute (Russia), European Medical Center (Russia), National Research University Higher School of Economics (Russia), Moscow Regional Research Institute of Obstetrics and Gynecology (Russia), N.N.Blokhin National Medical Research Center of Oncology (Russia)

2020

DECEMBER 2020

December 2020; *Molecular Cancer Therapeutics* The HPV and p63 Status in Penile Cancer Are Linked with the Infiltration and Therapeutic Availability of Neutrophils

Author-affiliated institutions include: University of Saarland (Germany), N.N. Blokhin National Medical Research Center of Oncology (Russia), University Medical Centre Bonn (Germany), University Erlangen-Nuremberg (Germany)

December 2020; International Journal of Gynecological Cancer **12-years results of the Kazakhstan breast cancer screening programme** Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan), Almaty Oncological Center (Kazakhstan)

December 2020; Middle European Scientific Bulletin Morphological features of tumor in different treatment options for patients With Locally Advanced Breast Cancer

Author-affiliated institutions include: Bukhara State Medical Institute (Uzbekistan)



NOVEMBER 2020

November 2020; *IAHPC Hospice Palliative Care News Digest* Advocacy Toolbox: Persuasive arguments for governments to enact palliative care Author-affiliated institutions include: Kazakhstan Palliative Care Association (Kazakhstan)

November 2020; Annals of Oncology

Dual targeting oxidative phosphorylation and glycolysis in triple-negative breast cancers: En route to effective inhibition of tumour metabolism

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center of Oncology (Russia), Gause Institute of New Antibiotics (Russia)

November 2020; Annals of Oncology

Survival in patients with contralateral breast cancer

Author-affiliated institutions include: National Cancer Research Center (Uzbekistan)

November 2020; Annals of Oncology

Analysis of esophageal cancer incidence for last 20 years in Uzbekistan

Author-affiliated institutions include: Republican Specialized Scientific Practical Medical Center of Oncology and Radiology (Uzbekistan)

November 2020; Annals of Oncology

Tendency of morbidity and mortality in cervical cancer in the last 10 years in the Republic of Uzbekistan

Author-affiliated institutions include: National Cancer Research Center (Uzbekistan), Republican Specialized Scientific Practical Medical Center of Oncology and Radiology (Uzbekistan)

OCTOBER 2020

October 2020; Annals of Oncology

Light-driven photoswitching of novel combretastatin A-4 analogues: Therapeutic targeting of epidermoid carcinoma cells

Author-affiliated institutions include: Lomonosov Moscow State University (Russia), N.N. Blokhin National Medical Research Center of Oncology (Russia), Scientific Technological Center of Organic and Pharmaceutical Chemistry (Armenia), Zelinsky Institute of Organic Chemistry (Russia)

October 2020; Annals of Oncology

Novel insights into the pharmacological effects of hypoxic cytotoxins in hormone-dependent breast cancer cells: ERα degradation and modulation of ERK signaling activity

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center of Oncology (Russia), Gause Institute of New Antibiotics (Russia), Instituto de Medicina Tropical Pedro Kourí (Cuba)

October 2020; Annals of Oncology

Imatinib mesylate (IM) promotes malignant behaviour of IM-resistant gastrointestinal stromal tumours (GISTs) via activation of FGF-signaling

Author-affiliated institutions include: Kazan State Medical University (Russia), Tatar Republic Cancer Center (Russia), N.N. Blokhin National Medical Research Center of Oncology (Russia)

October 2020; Annals of Oncology

Cytoplasmic actin isoforms influence on CSC-like properties

Author-affiliated institutions include: Lomonosov Moscow State University (Russia), N.N. Blokhin National Medical Research Center of Oncology (Russia) October 2020; Annals of Oncology

Notch- and P53-dependent crosstalk between tumour and stromal cells

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center of Oncology (Russia), Lomonosov Moscow State University (Russia)

October 2020; American Journal of Medicine and Medical Sciences

Comparative Assessment of the Immediate Results after Exenteration of Pelvic Organs with Simultaneous Pelvic Floor Reconstruction in Patients with Local Extended Cervical Cancer Author-affiliated institutions include: Republican Specialized Scientific and Practical Center of Oncology and Radiology (Uzbekistan)

October 2020; American Journal of Medicine and Medical Sciences Diagnostic value of p53 protein, epidermal growth factor, and endothelial vascular growth factor (VEGF) in polypousrhinosinusitis

Author-affiliated institutions include: Tashkent Medical Academy (Uzbekistan), Tashkent Stomatology Institute (Uzbekistan), Tashkent Institute of Postgraduate Medical Education (Uzbekistan)

SEPTEMBER 2020

September 2020; Annals of Oncology

Modulation of MCF-7 cell sensitivity to anticancer agents by targeting glycolysis Author-affiliated institutions include: N.N. Blokhin National Medical Research Center of Oncology (Russia), Gause Institute of New Antibiotics (Russia)

September 2020; BMC Medical Genomics

miRNAs expression signature potentially associated with lymphatic dissemination in locally advanced prostate cancer

Author-affiliated institutions include: Russian Academy of Sciences (Russia), National Medical Research Radiological Center (Russia)

September 2020; The New England Journal of Medicine

Nonmetastatic, Castration-Resistant Prostate Cancer and Survival with Darolutamide Author-affiliated institutions include: University of Paris-Saclay (France), Carolina Urologic Research Center (USA), Tampere University (Finland), Lithuanian University of Health Sciences (Lithuania), Stradins Clinical University Hospital (Latvia), N.N. Alexandrov National Cancer Center (Belarus), Hospital Erasto Gaertner (Brazil), National Medical Research Radiological Center (Russia), Massachusetts General Hospital Cancer Center (USA)

September 2020; *Nature*

Avelumab plus axitinib versus sunitinib in advanced renal cell carcinoma: biomarker analysis of the phase 3 JAVELIN Renal 101 trial

Author-affiliated institutions include: Memorial Sloan Kettering Cancer Center (USA), Pfizer (USA), Barts Cancer Institute (UK), Institut Gustave Roussy (France), The Netherlands Cancer Institute (Netherlands), Osaka University Hospital (Japan), Moscow Scientific Research Oncology Institute (Russia), The University of Texas MD Anderson Cancer Center (USA), Asan Medical Center (Korea)

September 2020; Siberian Journal of Oncology

Study of the Relationship Between KRAS Gene Mutations and Gender, Age and Race in Colorectal Cancer Patients Residing in the Republic of Kazakhstan

Author-affiliated institutions include: Kazakh Research Institute of Oncology and Radiology (Kazakhstan)



September 2020; American Journal of Biomedical and Life Sciences Investigation of Mechanism Activity of Antitumor and Radiosensitizing Activity of Preparations K-26 and K-26w

Author-affiliated institutions include: Practical Medical Center of Oncology and Radiology (Uzbekistan), Bukhara Oncological Centre (Uzbekistan), Tashkent State Economic University (Uzbekistan)

September 2020; International Journal of Gynecologic Cancer

SUCCOR study: an international European cohort observational study comparing minimally invasive surgery versus open abdominal radical hysterectomy in patients with stage IB1 cervical cancer

Author-affiliated institutions include: Clinica Universidad de Navarra (Spain), Istituto Europeo di Oncologia (Italy), Institut Bergonie (France), Emergency County Hospital (Romania), Queen Elizabeth Hospital (UK), Amsterdam University Medical Centre (Netherlands), University Oncologic Hospital (Bulgaria), National Center of Oncology (Azerbaijan), Kazahskij Naucno-issledovatel'skij Institut Onkologii i Radiologii (Kazakhstan), N.N. Petrov Research Institute of Oncology (Russia)

SUCCOR STUDY: AN INTERNATIONAL EUROPEAN COHORT OBSERVATIONAL STUDY Comparing minimally invasive surgery versus open abdominal radical Hysterectomy in patients with stage ib1 cervical cancer

The primary objective of the SUCCOR study, a European, multi-center, retrospective, observational cohort study was to evaluate disease-free survival in patients with stage IB1 (FIGO 2009) cervical cancer undergoing open vs minimally invasive radical hysterectomy. Minimally invasive surgery in cervical cancer was found to increase the risk of relapse and death compared with open surgery. In this study, avoiding the uterine manipulator and using maneuvers to avoid tumor spread at the time of colpotomy in minimally invasive surgery was associated with similar outcomes to open surgery. This research reaffirmed that the best approach when considering surgery for patients with early cervical cancer was an open approach rather than a laparoscopic approach, which has clinical applications for the global onco-gynecological community.



AUGUST 2020

August 2020; Cancer

Barriers to the early integration of palliative care in pediatric oncology in 11 Eurasian countries

Author-affiliated institutions include: Brown University (USA), Yerevan State Medical University (Armenia), National Cancer Council (Mongolia), Dmitry Rogachev National Research Center of Pediatric Hematology (Russia), Belarusian Center for Pediatric Oncology (Belarus), N.N. Blokhin Russian Cancer Research Center (Russia), St. Jude Children's Research Hospital (USA)

August 2020; Asian Pacific Journal of Cancer Prevention

Surveillance of Esophageal Cancer in the Republic of Uzbekistan from 2000 to 2018 Author-affiliated institutions include: Republican Specialized Scientific and Practical Center of Oncology and Radiology (Uzbekistan), Nagoya University (Japan), Tashkent State Dental Institute (Uzbekistan)

SURVEILLANCE OF ESOPHAGEAL CANCER IN THE REPUBLIC OF UZBEKISTAN FROM 2000 TO 2018

Esophageal cancer (EC) incidence rates are variable worldwide, with the highest rates found in southern and eastern Africa and eastern Asia. Due to high prevalence in the Eurasian region, epidemiological data was obtained by an Uzbekistan-Japan scientific collaborative for more than 17,000 EC patients in Uzbekistan and used to outline important trends. Worldwide, the 5-year relative survival rates for EC is 20%. Because EC makes up just about 1% of all cancers diagnosed in the United States, research studies conducted globally may have important clinical applications for patients that may not reside in areas with adequate sample size to reach significance.



August 2020; Organic & Biomolecular Chemistry

Pyrazoles: 'one-pot' synthesis from arenes and carboxylic acids Author-affiliated institutions include: Moscow State University (Russia), Zhengzhou University (China), N.N. Blokhin Russian Cancer Research Center (Russia)

JULY 2020

July 2020; Clinical Genitourinary

COVID-19 in Patients With Renal Cell Carcinoma in the Russian Federation

Author-affiliated institutions include: Hadassah Medical Moscow (Russia), Pacific State Medical University (Russia), N.N. Petrov NMRC of Oncology (Russia), St Alexei Central Clinical Hospital (Russia), N.N. Blokhin Russian Cancer Research Center (Russia)

July 2020; Clinical Pharmacology in Drug Development

Effect of Itraconazole, a Potent CYP3A4 Inhibitor, on the Steady-State Pharmacokinetics of Vemurafenib in Patients With *BRAF*V600 Mutation-Positive Malignancies

Author-affiliated institutions include: Roche Innovation Center New York (USA), Genentech, Inc. (USA), F. Hoffmann-La Roche Ltd. (Canada), N. N. Blokhin Medical Research Center of Oncology (Russia), Yonsei University College of Medicine (Korea)

July 2020; *Pharmaceuticals*

Immune Pathogenesis of COVID-19 Intoxication: Storm or Silence?

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center of Oncology (Russia)

July 2020; Chemistry of Heterocyclic Compounds

Indolo[2,3-a]carbazoles: diversity, biological properties, application in antitumor therapy Author-affiliated institutions include: N. N. Blokhin Russian Cancer Research Center (Russia)

July 2020; Chemistry of Heterocyclic Compounds

Synthesis and antiproliferative activity of salicylidenehydrazones based on indole-2(3)carboxylic acids

Author-affiliated institutions include: Mendeleev University of Chemical Technology (Russia), Gause Institute of New Antibiotics (Russia), N. N. Blokhin Russian Cancer Research Center (Russia)



July 2020; Annals of Oncology

Retrospective comparison efficacy and toxicity FOLFIRI plus aflibercept or bevacizumab in patients with metastatic colorectal cancer: Results of the multicenter observational study

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center (Russia), Saint-Petersburg Scientific Practical Center for Specialized Medical Care (Russia), P.Herzen Moscow Oncology Research Institute (Russia)

July 2020; Annals of Oncology The comparison of mFOLFOX-6, mDCF, mFOLFIRINOX in the first-line treatment of advanced gastric cancer

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center (Russia), The Lyadov Clinic (Russia), I.M. Sechenov First Moscow State Medical University (Russia)

July 2020; Annals of Oncology

Clinical utility of circulating tumor DNA in resectable and advanced pancreatic cancer Author-affiliated institutions include: N.N. Blokhin National Medical Research Center (Russia), Institute of Chemical Biology and Fundamental Medicine (Russia)

July 2020; Annals of Oncology

Clinical evaluation of complex treatment of colorectal cancer with liver metastases Author-affiliated institutions include: Tashkent Medical Academy (Uzbekistan), N.N. Blokhin National Medical Research Center (Russia)

CLINICAL EVALUATION OF COMPLEX TREATMENT OF COLORECTAL CANCER WITH LIVER METASTASES

Colorectal cancer (CRC) is characterized by slow growth, and clinical manifestations depend on the location, type, spread of the tumor and complications. Among all patients with cancer of the rectum or colon, a quarter at the time of diagnosis revealed liver metastases. This study conducted by Russian and Uzbekistan researchers featured 68 CRC patients that underwent various treatments of liver metastases. It was found that surgical removal of metastases significantly increased treatment effectiveness, with both solitary and multiple metastatic liver damage compared with only conservative methods. These results have a consequential impact on the treatment plan for the more than a million global CRC cases that are diagnosed each year.



July 2020; Annals of Oncology Importance determination of interleukin-6 in bile and blood in tumours of the bileopancreatoduodenal zone

Author-affiliated institutions include: Tashkent Medical Academy (Uzbekistan), N.N. Blokhin National Medical Research Center (Russia)

July 2020; Annals of Oncology

The study of mutations of the KRAS, NRAS, and BRAF genes in patients with colorectal cancer depending on gender, age, race in the population of the Republic of Kazakhstan Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan)

July 2020; Annals of Oncology

The diagnostic dilemma between chronic pancreatitis and pancreatic cancer Author-affiliated institutions include: N.N. Blokhin National Medical Research Center (Russia), Tashkent Medical Academy (Uzbekistan)

July 2020; Annals of Oncology

Meta-analyses on mutation status concordance between tumor tissue and circulating tumor DNA and prognostic value of ctDNA in pancreatic cancer

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center (Russia)

July 2020; Journal of Clinical Oncology

Opportunities and challenges in cervical cancer screening program in Kazakhstan: Results after imPACT review

Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan)

July 2020; Annals of Cancer Research and Therapy

Giant leiomyosarcoma of the upper third of esophagus. (a case report)

Author-affiliated institutions include: Republican Specialized Scientific and Practical Center of Oncology and Radiology (Uzbekistan), Fukushima Medical University (Japan), Samarkand State Medical Institute (Uzbekistan)

July 2020; International Journal of Gynecological Cancer

Intracardiac intravenous leiomyomatosis: diagnosis and management

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center (Russia), Russian Medical Academy of Continuing Professional Education (Russia), MD Anderson Cancer Center (USA)

INTRACARDIAC INTRAVENOUS LEIOMYOMATOSIS: DIAGNOSIS AND MANAGEMENT

Through this U.S.-Russia collaborative effort, authors discussed strategies for patients requiring complex and multidisciplinary surgery for intravenous leiomyomatosis with intracardiac extension, a rare condition characterized by growth of a uterine neoplasm that extends through the uterine vascular channels, through the venous system, and ultimately into the cardiac chambers. The tumors may lead to significant physiologic disturbances and heart failure. In cases when the tumor thrombus reaches the pulmonary arteries, severe pulmonary embolism can occur. In some cases cardiac arrest may occur, particularly when the tumor involves the cardiac chambers. It commonly occurs in premenopausal women and approximately 83% have undergone a previous hysterectomy or myomectomy. By outlining the details on management strategies in Russia, clinicians around the world can bring these lessons learned into their treatment of this population.



July 2020; *Biomaterials Science* A versatile platform for bioimaging based on colominic acid-decorated upconversion nanoparticles

Author-affiliated institutions include: Russian Academy of Sciences (Russia), Sechenov First Moscow State Medical University (Russia), N.N. Blokhin Russian Cancer Research Center (Russia), Lomonosov Moscow State University (Russia)

July 2020; Gastric Cancer

Health-related quality of life associated with trifluridine/tipiracil in heavily pretreated metastatic gastric cancer: results from TAGS

Author-affiliated institutions include: Vall d'Hebron University Hospital and Institute of Oncology (Spain), National Cancer Center Hospital East (Japan), Omsk Regional Clinical Centre of Oncology (Russia), The Christie NHS Foundation Trust (UK), Minsk City Clinical Oncology Dispensary (Belarus), Azienda Ospedaliera di Cremona (Italy), N.N. Blokhin Russian Cancer Research Center (Russia), Alexandrov National Cancer Centre of Belarus (Belarus), Hacettepe University (Turkey),



Institut de Recherches Internationales Servier (France), Memorial Sloan Kettering Cancer Center (USA)

JUNE 2020

June 2020; The Lancet

Atezolizumab, vemurafenib, and cobimetinib as first-line treatment for unresectable advanced BRAFV600 mutation-positive melanoma (IMspire150): primary analysis of the randomised, double-blind, placebo-controlled, phase 3 trial

Author-affiliated institutions include: Medizinische Hochschule Hannover (Germany), Moscow City Oncology Hospital (Russia), National and Kapodistrian University of Athens (Greece), Université Paris-Saclay (France), University of Colorado Comprehensive Cancer Center (USA), NN Petrov National Medical Research Center of Oncology (Russia), Hospital de Clínicas de Porto Alegre (Brazil), University Hospital Tübingen (Germany), Maria Sklodowska-Curie National Research Institute of Oncology (Poland)

June 2020; International Journal of Cancer

Fruits and vegetables intake and gastric cancer risk: A pooled analysis within the Stomach cancer Pooling Project

Author-affiliated institutions include: Universidade do Porto (Portugal), University of Milan (Italy), Harbin Medical University (China), University of Ottawa (Canada), UCLA Jonsson Comprehensive Cancer Center (USA), National Institute of Public Health (Mexico), National Cancer Center (Japan), Nikkei Disease Prevention Center (Brazil), Tehran University of Medical Sciences (Iran), N.N. Blokhin Cancer Research Center (Russia), National Cancer Institute (USA), Yale School of Medicine (USA), Icahn School of Medicine at Mount Sinai (USA)

FRUITS AND VEGETABLES INTAKE AND GASTRIC CANCER RISK: A POOLED ANALYSIS WITHIN THE STOMACH CANCER POOLING PROJECT

In this international study with collaborators from North America, South America, Europe, and Asia, the relationship between fruits and vegetables intake and gastric cancer was assessed, complementing previous work in the field. Data from 25 studies (8,456 cases and 21,133 controls) with information on fruits and/or vegetables intake were used. Gastric cancer risk was lower for a higher intake of fruits, non-citrus fruits, vegetables and fruits and vegetables (OR: 0.61, 95% CI: 0.49–0.75); results were consistent across sociodemographic and lifestyles categories, as well as study characteristics. A protective effect of all fruits, non-citrus fruits and vegetables was confirmed, supporting further dietary recommendations to decrease the burden of gastric cancer, the fifth most commonly diagnosed cancer in the world.



June 2020; Targeted Oncology Real-World Outcomes in First-Line Treatment of Metastatic Castration-Resistant Prostate Cancer: The Prostate Cancer Registry

Author-affiliated institutions include: NHS Foundation Trust and Sarah Cannon Research Institute (UK), Skåne University Hospital (Sweden), Ghent University Hospital (Belgium), University of Barcelona (Spain), Medical University of Vienna (Austria), Polish Mother's Memorial Hospital – Research Institute (Poland), N.N. Blokhin National Cancer Research Center (Russia), Universidade de Lisboa (Portugal)

June 2020; Cancer

A multicountry assessment in Eurasia: Alignment of physician perspectives on palliative care integration in pediatric oncology with World Health Organization guidelines

Author-affiliated institutions include: St. Jude Children's Research Hospital (USA), Yerevan State Medical University (Armenia), National Cancer Council (Mongolia), Dmitry Rogachev National Research Center of Pediatric Hematology, Oncology, and Immunology (Russia), Belarusian Center for Pediatric Oncology, Hematology, and Immunology (Belarus), N. N. Blokhin Russian Cancer Research Center (Russia)

June 2020; *Bioorganic & Medicinal Chemistry Letters* Novel anticancer drug curaxin CBL0137 impairs DNA methylation by eukaryotic DNA methyltransferase Dnmt3a

Author-affiliated institutions include: Lomonosov Moscow State University (Russia), N.N. Blokhin Cancer Research Center (Russia)

June 2020; Eurasian Union of Scientists

A review of modern immunotherapy in gastrointestinal malignant tumors Author-affiliated institutions include: Republican Specialized Scientific and Practical Center of Oncology and Radiology (Uzbekistan)

June 2020; European Journal of Cancer

Human chorionic gonadotropin-positive seminoma patients: A registry compiled by the global germ cell tumor collaborative group (G3)

Author-affiliated institutions include: Medical Center Hamburg-Eppendorf (Germany), Copenhagen University Hospital (Denmark), N. N. Blokhin Russian Cancer Research Center (Russia), University Hospital Zürich (Switzerland), Hospital La Fe (Spain), Peter MacCallum Cancer Centre (Australia)

MAY 2020

May 2020; Clinical Endoscopy

Trends of Colorectal Cancer Prevalence in Kazakhstan Related to Screening Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan), Nazarbayev University (Kazakhstan)

May 2020; International Review of Neurobiology

Molecular determinants of the interaction between glioblastoma CD133+ cancer stem cells and the extracellular matrix

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center of Oncology (Russia), Far Eastern Federal University (Russia)

May 2020; Nature

Protein-altering germline mutations implicate novel genes related to lung cancer development

Author-affiliated institutions include: Geisel School of Medicine at Dartmouth (USA), Memorial Sloan Kettering Cancer Center (USA), National Cancer Institute (USA), Laval University (Canada), Baylor College of Medicine (USA), International Agency for Research on Cancer (France), University of Hawaii Cancer Center (USA), University Göttingen (Germany), Case Western Reserve University (USA), University of Liverpool (UK), Harvard T.H. Chan School of Public Health (USA), Radboud Institute for Health Sciences (Netherlands), Sejong University (Republic of Korea), Lund University (Sweden), N.N.Blokhin Cancer Research Centre (Russia), International Organization for Cancer Prevention and Research (Serbia), Memorial Sloan Kettering Cancer Center (USA)



May 2020; Proteomes

Is It Possible to Find Needles in a Haystack? Meta-Analysis of 1000+ MS/MS Files Provided by the Russian Proteomic Consortium for Mining Missing Proteins

Author-affiliated institutions include: Institute of Biomedical Chemistry (Russia), Skolkovo Institute of Science and Technology (Russia), V.I. Kulakov National Medical Research Center of Obstetrics, Gynecology and Perinatology (Russia), Russian Academy of Sciences (Russia), Moscow Institute of Physics and Technology (Russia), N.N. Blokhin Russian Cancer Research Center (Russia)

May 2020: The New England Journal of Medicine (NEJM)

Atezolizumab plus Bevacizumab in Unresectable Hepatocellular Carcinoma

Author-affiliated institutions include: UCLA Jonsson Comprehensive Cancer Center (USA), City of Hope Comprehensive Cancer Center (USA), Jinling Hospital (China), National Cancer Center Hospital East (Japan), University Medical Center Mainz (Germany), Paris-Saclay University (France), Seoul National University College of Medicine (South Korea), N.N. Blokhin Russian Cancer Research Center (Russia), University of Texas M.D. Anderson Cancer Center (USA)

May 2020; Frontiers in Oncology

Measuring Intratumoral Heterogeneity of Immune Repertoires

Author-affiliated institutions include: Privolzhsky Research Medical University (Russia), Shemyakin and Ovchinnikov Institute of Bioorganic Chemistry (Russia), Pirogov Russian National Research Medical University (Russia), Moscow State University (Russia), N. N. Blokhin Russian Cancer Research Center (Russia)

May 2020; Clinical Endoscopy

Trends of Colorectal Cancer Prevalence in Kazakhstan Related to Screening

Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan), National Research Oncology Center (Kazakhstan), Nazarbayev University (Kazakhstan)

TRENDS OF COLORECTAL CANCER PREVALENCE IN KAZAKHSTAN RELATED TO SCREENING

A retrospective analysis was conducted of the overall incidence of colorectal cancer (CRC) in Kazakhstan, which has a relatively low agestandardized rate of 15.4 (compared to 25.6 in the U.S.) In 2011, a national CRC program was implemented; incidence subsequently increased but the distribution of cancer cases was significant. An increase in cases was captured for stages I and II, but the percentage of stage III and IV cases decreased significantly. This resulted in economic gains as earlier stages were less expensive to treat, as well as improved morbidity and mortality outcomes. This provides further evidence for the U.S. to adopt robust CRC screening programs. Currently, 69% of U.S. adults aged 50 to 75 years are up-to-date with CRC screening, concerning still because CRC is the third leading cause of cancer-related deaths in the States.

May 2020; Journal of Clinical Oncology

CTNNB1, PIK3CA, EIF1AX, and PTEN polymorphisms found in aggressive types of differentiated thyroid cancer

Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan)

May 2020; Journal of Clinical Oncology

The results of a study of the concordance of RAS status in liquid and invasive biopsies in patients with metastatic colorectal cancer in the Republic of Kazakhstan Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan)

May 2020; Journal of Clinical Oncology

Quality of life of cervical cancer patients after specialized treatment in Kazakhstan Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan)

May 2020; Journal of Clinical Oncology

Next generation sequencing analysis of key genes in breast cancer patients from Kazakh population

Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan), Insitute of General Genetics and Cytology CS MES RK (Kazakhstan), Kazakh National University Al-Faraby (Kazakhstan)

APRIL 2020

April 2020; *European Oncology*

Correlation of Prostate-specific Antigen Kinetics with Overall Survival and Radiological Progression-free Survival in Metastatic Castration-sensitive Prostate Cancer Treated with Abiraterone Acetate plus Prednisone or Placebos Added to Androgen Deprivation Therapy: Post Hoc Analysis of Phase 3 LATITUDE Study

Author-affiliated institutions include: National Cancer Center Hospital East (Japan), BC Cancer Agency (Canada), Istanbul University-Cerrahpasa (Turkey), 12 de Octubre University Hospital (Spain), Studienpraxis Urologie (Germany), Instituto de Oncologia de Rosário (Argentina), P.A. Hertsen Moscow Cancer Research Institute (Russia), Janssen Research & Development (USA), Oxford University Hospitals Foundation NHS Trust (UK)

April 2020; Bulletin of Experimental Biology and Medicine

Prognostic Role of Matrix Metalloproteinases 2, 7, 8, 9 and Their Type 1 Tissue Inhibitor in Blood Serum of Patients with Kidney Cancer

Author-affiliated institutions include: N. N. Blokhin National Medical Research Center of Oncology (Russia), A. I. Evdokimov Moscow State University of Medicine and Dentistry (Russia)

April 2020; JAMA: The Journal of the American Medical Association

Effect of Doxorubicin Plus Olaratumab vs Doxorubicin Plus Placebo on Survival in Patients With Advanced Soft Tissue Sarcomas: The ANNOUNCE Randomized Clinical Trial

Author-affiliated institutions include: Memorial Sloan Kettering Cancer Center (USA), Weill Cornell Medical College (USA), Dana-Farber Cancer Institute and Harvard Medical School (USA), Leuven Cancer Institute (Belgium), University of Sevilla (Spain), University of Copenhagen (Denmark), Taipei Veterans General Hospital (Taiwan), Princess Margaret Cancer Center (Canada), National Cancer Center Hospital (Japan), Sungkyunkwan University Samsung Medical Center (Republic of Korea), N.N. Blokhin Cancer Research Center (Russia), Magyar Honvedseg Eu Kp (Hungary), Royal Marsden NHS Foundation Trust and Institute of Cancer Research (UK)

April 2020; European Journal of Pharmacology

Luteolin-7-methylether from Leonurus japonicus inhibits estrogen biosynthesis in human ovarian granulosa cells by suppression of aromatase (CYP19)

Author-affiliated institutions include: Yunnan University (China), Zhejiang University (China), Tashkent Pharmaceutical Institute (Uzbekistan)

April 2020; Cold Spring Harbor Molecular Case Studies

RNA sequencing profiles and diagnostic signatures linked with response to ramucirumab in gastric cancer

Author-affiliated institutions include: I.M. Sechenov First Moscow State Medical University (Russia), Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry (Russia), N.N. Blokhin Russian Cancer Research Center (Russia)



MARCH 2020

March 2020; Journal of Coloproctology

Trends in colorectal cancer incidence in western Kazakhstan through the first decade of the screening implementation, 2009–2018

Author-affiliated institutions include: West Kazakhstan Marat Ospanov Medical University (Kazakhstan)

March 2020; Environmental Science and Pollution Research The impact of neighborhood to industrial areas on health in Uzbekistan: an ecological analysis of congenital diseases, infant mortality, and lung cancer

Author-affiliated institutions include: Tashkent Institute of Postgraduate Medical Education (Uzbekistan), University Medical Center Mainz (Germany)

March 2020; Journal of Cancer Education

Management of Muscle Invasive Bladder Cancer with Bladder Preservation in Russia: a Survey-Based Analysis of Current Practice and the Impact of an Educational Workshop on Clinical Expertise

Author-affiliated institutions include: Knight Cancer Institute, Oregon Health and Science University (USA), Ulyanovsk Regional Cancer Center (Russia), PET-Technology Podolsk (Russia), N.N. Blokhin Russian Cancer Center (Russia)

March 2020; Frontiers in Immunology

Diagnosis and Management of Secondary HLH/MAS Following HSCT and CAR-T Cell Therapy in Adults; A Review of the Literature and a Survey of Practice Within EBMT Centres on Behalf of the Autoimmune Diseases Working Party (ADWP) and Transplant Complications Working Party (TCWP)

Author-affiliated institutions include: NHS Foundation Trust (UK), University Hospitals Leuven (Belgium), San Raffaele Hospital (Italy), Hôpital Saint-Antoine (France), N.N. Blokhin Russian Cancer Research Center (Russia), University of Zagreb (Croatia), University of Warsaw (Poland)

March 2020; Biomolecules

Proteomic Analysis of Blood Exosomes from Healthy Females and Breast Cancer Patients Reveals an Association between Different Exosomal Bioactivity on Non-tumorigenic Epithelial Cell and Breast Cancer Cell Migration in Vitro

Author-affiliated institutions include: Russian Academy of Sciences (Russia), N.N. Blokhin Cancer Research Center (Russia), Novosibirsk Regional Clinical Oncological Dispensary (Russia)

March 2020; Medicinal Chemistry Research

Biologically active quinazoline-based hydroxamic acids

Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia), National Research Centre "Kurchatov Institute" (Russia)

March 2020; International Journal of Cancer

SI-CLP inhibits the growth of mouse mammary adenocarcinoma by preventing recruitment of tumor-associated macrophages

Author-affiliated institutions include: Ruprecht-Karls University of Heidelberg (Germany), The First Affiliated Hospital of Anhui Medical University (China), Huazhong University of Science and Technology (China), Tomsk State University (Russia), Latvian Biomedical Research and Study Centre (Latvia), N.N. Blokhin Cancer Research Center (Russia), German Research Center for Environmental Health (Germany)

FEBRUARY 2020

February 2020; European Journal of Surgical Oncology **The Value of Multiple Drug Resistance in Colorectal Cancer** Author-affiliated institutions include: National Cancer Center of Uzbekistan (Uzbekistan)

February 2020; Oncology

Expression of Receptor Tyrosine Kinases on Peripheral Blood Mononuclear Cells and Tumor-Infiltrating Lymphocytes in Patients with Renal Cell Carcinoma and Healthy Donors Author-affiliated institutions include: Kidney Cancer Research Bureau (Russia), N.N. Blokhin Russian Cancer Research Center (Russia), A.M. Granov Russian Scientific Center of Radiology and Surgical Technologies (Russia)

February 2020; International Journal of Rheumatic Diseases

Characteristics of diffuse large B-cell lymphoma in patients with primary Sjögren's syndrome Author-affiliated institutions include: V.A. Nasonova Research Institute of Rheumatology (Russia), N.N. Blokhin Russian Cancer Research Center (Russia)

February 2020; Journal of Clinical Oncology

Efficacy and safety of lenvatinib in combination with everolimus in metastatic renal cell carcinoma resistant to antiangiogenic targeted therapy: Russian multicenter observational study ROSLERCM

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center (Russia), Republican Clinical Oncological Center (Russia), Tver Regional Oncology Center (Russia)

February 2020; Journal of Clinical Oncology

Prognostic factors in advanced seminoma: An analysis from the IGCCCG Update Consortium Author-affiliated institutions include: University of Bern (Switzerland), European Organisation for Research and Treatment of Cancer (Belgium), Copenhagen University (Denmark), N.N. Blokh in Russian Cancer Research Center (Russia), Indiana University Melvin and Bren Simon Cancer Center (USA), Skåne University Hospital (Sweden), University of Paris (France), University Medical Center Groningen (Netherlands), Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori (Italy), Memorial Sloan Kettering Cancer Center (USA)

February 2020; Journal of Clinical Oncology

A phase II pilot study of the efficacy and safety of nivolumab and ipilimumab in T1aN0M0 renal cell carcinoma patients ineligible for surgical treatment

Author-affiliated institutions include: Kidney Cancer Research Bureau (Russia), N.N. Blokhin National Medical Research Center (Russia), Royal Free London NHS Foundation Trust (UK)

February 2020; Macromolecular Symposia

Doxorubicin Loaded Magnetosensitive Water-Soluble Nanogel Based on NIPAM and Iron (3+) Containing Nanoparticles

Author-affiliated institutions include: Lomonosov Moscow State University (Russia), N.N. Blokhin Russian Cancer Research Center (Russia), Russian Academy of Sciences (Russia)

February 2020; JAMA Oncology

Global Retinoblastoma Presentation and Analysis by National Income Level

Author-affiliated institutions include: London School of Hygiene & Tropical Medicine (UK), Sheba Medical Center (Israel), Mohammed V University (Morocco), Aminu Kano Teaching Hospital (Nigeria), Basra Children's Specialty Hospital (Iraq), University of California, San Francisco (USA), Banaras Hindu University (India), Zarifa Aliyeva National Center of Ophthalmology (Azerbaijan), Hospital Vall d'Hebron (Spain), University Hospital Center Mother Theresa (Albania), Scientific



Center of Pediatrics and Pediatric Surgery (Kazakhstan), Children's University Hospital of Krakow (Poland), Filatov Institute of Eye Diseases and Tissue Therapy (Ukraine), National Cancer Center of Uzbekistan (Uzbekistan), N.N. Blokhin Russian Cancer Research Center (Russia)

February 2020; European Journal of Cancer

CheckMate 171: A phase 2 trial of nivolumab in patients with previously treated advanced squamous non-small cell lung cancer, including ECOG PS 2 and elderly populations Author-affiliated institutions include: Vall d'Hebron University Hospital (Spain), University of Bologna (Italy), The Oncology Institute Ion Chiricuta and University of Medicine and Pharmacy Iuliu Hatieganu (Romania), N.N. Blokhin Russian Cancer Research Center (Russia), Medical University of Lublin (Poland)

February 2020; International Journal of Cancer

Education and gastric cancer risk—An individual participant data meta-analysis in the StoP project consortium

Author-affiliated institutions include: University of Milan (Italy), Harbin Medical University (China), UCLA Jonsson Comprehensive Cancer Center (USA), University of Ottawa (Canada), N.N. Blokhin Cancer Research Center (Russia)

February 2020; Analytical Biochemistry

Asymmetric mutant-enriched polymerase chain reaction and quantitative DNA melting analysis of *KRAS* mutation in colorectal cancer

Author-affiliated institutions include: N.N. Blokhin Cancer Research Center (Russia)

February 2020; Journal of Cancer Education

Radiotherapy for Hepatocellular Carcinoma in Russia: a Survey-Based Analysis of Current Practice and the Impact of an Educational Workshop on Clinical Expertise

Author-affiliated institutions include: OHSU Knight Cancer Institute (USA), MD Anderson Cancer Center (USA), Memorial Sloan Kettering Cancer Center (USA), Moffitt Cancer Center (USA), Ulyanovsk Regional Cancer Center (Russia), N.N. Blokhin Russian Cancer Center (Russia), Russian Society of Clinical Oncology (Russia)

February 2020; 2019 International Conference on Information Science and Communications Technologies

Mathematical modeling of regulatory mechanisms of cardiological pathologies in the tumor process

Author-affiliated institutions include: Tashkent University of Information Technologies (Uzbekistan), Republican Cancer Research Center of the Ministry of Health (Uzbekistan), Tashkent Medical Academy (Uzbekistan)

JANUARY 2020

January 2020; Probl Sotsialnoi Gig Zdravookhranenniiai Istor Med The study of rate and spectrum of frequency of mutations of gene KRAS in patients with colorectal cancer in the Republic of Kazakhstan

Author-affiliated institutions include: Kazakhstan Research Institute of Oncology and Radiology (Kazakhstan)

January 2020; Frontiers in Oncology

Case of Hereditary Papillary Renal Cell Carcinoma Type I in a Patient With a Germline MET Mutation in Russia

Author-affiliated institutions include: Sechenov University (Russia), Lopatkin Institute of Urology

and Interventional Radiology (Russia), Research Centre for Medical Genetics (Russia), N. N. Blokhin National Medical Research Center of Oncology (Russia)

January 2020; European Journal of Cancer

Long-term outcomes in patients with *BRAF* V600-mutant metastatic melanoma receiving dabrafenib monotherapy: Analysis from phase 2 and 3 clinical trials

Author-affiliated institutions include: University Hospital Schleswig-Holstein (Germany), Istituto Nazionale Tumori IRCCS Fondazione (Italy), University Hospital of Essen (Germany), Aix-Marseille University (France), UCLA Jonsson Comprehensive Cancer Center (USA), N.N. Blokhin Russian Cancer Research Center (Russia), Maria Sklodowska-Curie Institute (Poland), Sir Charles Gairdner Hospital (Australia), Memorial Sloan Kettering Cancer Center (USA)

January 2020; Angewandte Chemie International Edition Parahydrogen-Induced Hyperpolarization of Gases

Author-affiliated institutions include: International Tomography Center (Russia), Novosibirsk State University (Russia), University of York (UK), North Carolina State University (USA), Wayne State University (USA)

January 2020; Cancer

Systemic treatments in MDM2 positive intimal sarcoma: A multicentre experience with anthracycline, gemcitabine, and pazopanib within the World Sarcoma Network

Author-affiliated institutions include: IRCCS Fondazione Istituto Nazionale Tumori (Italy), Gustave Roussy Cancer Campus (France), Dana-Farber Cancer Institute (USA), National Cancer Center Hospital (Japan), University of Michigan (USA), Memorial Sloan Kettering Cancer Center (USA), Maria Sklodowska-Curie Institute-Oncology Center (Poland), The University of Texas MD Anderson Cancer Center (USA), N.N. Blokhin Russian Cancer Research (Russia), Northwell Cancer Institute (USA), Institute of Cancer Research (UK), Brigham and Women's Hospital and Harvard Medical School (USA)

January 2020; International Journal of Epidemiology

Occupational exposures and odds of gastric cancer: a StoP project consortium pooled analysis Author-affiliated institutions include: Vanderbilt University School of Medicine (USA), Icahn School of Medicine at Mount Sinai (USA), University of Ottawa (Canada), Harbin Medical University (China), Institute for Cancer Research, Prevention and Clinical Network (Italy), National Cancer Center (Japan), Nikkei Disease Prevention Center (Brazil), N.N. Blokhin Cancer Research Center (Russia), Memorial Sloan Kettering Cancer Centre (USA)

January 2020; Molecules

Revelation of Proteomic Indicators for Colorectal Cancer in Initial Stages of Development Author-affiliated institutions include: V.N. Orekhovich Institute of Biomedical Chemistry (Russia), N.N. Blokhin Russian Cancer Research Center (Russia), Sechenov University (Russia), East China University of Technology (China)

January 2020; Journal of Clinical Oncology

Health-Related Quality of Life With Carboplatin-Paclitaxel or nab-Paclitaxel With or Without Pembrolizumab in Patients With Metastatic Squamous Non-Small-Cell Lung Cancer

Author-affiliated institutions include: Université Paul Sabatier (France), Maria Skłodowska-Curie Institute of Oncology (Poland), Leningrad Regional Clinical Hospital (Russia), Hospital Universitario Virgen Macarena (Spain), University of Wollongong (Australia), Istanbul Medeniyet University Hospital (Turkey), N.N. Blokhin Russian Cancer Research Center (Russia), Northside Hospital Cancer Institute (USA)



January 2020; Nature

Immune-mediated genetic pathways resulting in pulmonary function impairment increase lung cancer susceptibility

Author-affiliated institutions include: University of California San Francisco (USA), International Agency for Research on Cancer (France), National Cancer Institute (USA), Imperial College London (UK), N.N. Blokhin Cancer Research Centre (Russia), Huntsman Cancer Institute (USA), H. Lee Moffitt Cancer Center & Research Institute (USA), Markey Cancer Center (USA), National Institute of Occupational Health (Norway)

January 2020; *Steroids* New steroidal oxazolines, benzoxazoles and benzimidazoles related to abiraterone and galeterone

Author-affiliated institutions include: Orekhovich Institute of Biomedical Chemistry (Russia), N.N. Blokhin Cancer Research Center (Russia), RUDN University (Russia), Engelhardt Institute of Molecular Biology (Russia)

January 2020; Annals of Oncology

Prognostic impact of baseline tumour immune infiltrate on disease-free survival in patients with completely resected, *BRAF*v600 mutation-positive melanoma receiving adjuvant vemurafenib

Author-affiliated institutions include: Istituto Nazionale Tumori (Italy), University of Colorado Comprehensive Cancer Center (USA), University Hospital of Siena (Italy), N.N. Blokhin Russian Cancer Research Center (Russia), Dnipropetrovsk State Medical Academy (Ukraine), Poznan University of Medical Sciences (Poland), German Cancer Consortium (Germany)

January 2020; ESMO Open

Efficacy of platinum-based chemotherapy and prognosis of patients with pancreatic cancer with homologous recombination deficiency: comparative analysis of published clinical studies Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia)

2019

DECEMBER 2019

December 2019; Journal of Ultrasound in Medicine Histotripsy: The Next Generation of High-Intensity Focused Ultrasound for Focal Prostate Cancer Therapy

Author-affiliated institutions include: University of Washington (USA), M. V. Lomonosov Moscow State University (Russia)

December 2019; Journal of Clinical Oncology

Pembrolizumab in Relapsed or Refractory Primary Mediastinal Large B-Cell Lymphoma Author-affiliated institutions include: Dana-Farber Cancer Institute (USA), Pirogov National Medical Surgical Center (Russia), Hôpital Saint-Louis (France), Hôpital Haut-Levêque (France), N.N. Blokhin Russian Cancer Research Center (Russia), Ankara University Medical School (Turkey), Clinica Alemana de Santiago (Chile), The Ohio State University Comprehensive Cancer Center (USA)

December 2019; *Nanomaterials*

Comparison of Different Approaches to Surface Functionalization of Biodegradable Polycaprolactone Scaffolds Author-affiliated institutions include: National University of Science and Technology (Russia), Brno University of Technology (Czech Republic), N.N. Blokhin Russian Cancer Research Center (Russia)

December 2019; European Journal of Cancer

Health-related quality of life in patients with fully resected *BRAF*V600 mutation-positive melanoma receiving adjuvant vemurafenib

Author-affiliated institutions include: University Hospital Essen (Germany), University Hospital of Siena (Italy), N.N. Blokhin Russian Cancer Research Center (Russia), Dnipropetrovsk State Medical Academy (Ukraine), University of Colorado Comprehensive Cancer Center (USA)

NOVEMBER 2019

November 2019; Journal of Cancer Metastasis and Treatment

Histone chaperone FACT and curaxins: effects on genome structure and function Author-affiliated institutions include: Fox Chase Cancer Center (USA), Institute of Gene Biology (Russia), Lomonosov Moscow State University (Russia), University of Utah School of Medicine (USA)

November 2019; Chemistry of Heterocyclic Compounds

New 3,4-bis(indol-1-yl)maleimides as protein kinase inhibitors

Author-affiliated institutions include: Gause Institute of New Antibiotics (Russia), Tumor Biology Centre in Freiburg (Germany), N.N. Blokhin Russian Cancer Research Center (Russia)

November 2019; European Journal of Cancer

Safety and efficacy of nivolumab in challenging subgroups with advanced melanoma who progressed on or after ipilimumab treatment: A single-arm, open-label, phase II study (CheckMate 172)

Author-affiliated institutions include: German Cancer Consortium (Germany), Istituto Nazionale Tumori IRCCS Fondazione Pascale (Italy), Netherlands Cancer Institute (Netherlands), Hospital Universitario La Paz (Spain), N.N. Blokhin Russian Cancer Research Centre (Russia), Laiko General Hospital (Greece), Mount Vernon Cancer Centre (UK)

November 2019; Rheumatology International

Clonal relationship of marginal zone lymphoma and diffuse large B-cell lymphoma in Sjogren's syndrome patients: case series study and review of the literature

Author-affiliated institutions include: V.A. Nasonova Research Institute of Rheumatology (Russia), N.N. Blokhin Russian Cancer Research Center (Russia), I.M. Sechenov First Moscow State Medical University (Russia), National Research Center for Hematology (Russia)

November 2019; World Journal of Urology

Complication rate after cystectomy following pelvic radiotherapy: an international, multicenter, retrospective series of 682 cases

Author-affiliated institutions include: University of Torino School of Medicine (Italy), University of Barcelona (Spain), University Hospitals Leuven (Belgium), Université Paris-Diderot (France), Weill Cornell Medical College (USA), N.N. Blokhin Russian Cancer Research Center (Russia), University of Miami Miller School of Medicine (USA)

November 2019; Mendeleev Communications

Synthesis, structure and cytotoxicity of a zinc(II) bromide complex with caffeine

Author-affiliated institutions include: M.V. Lomonosov Institute of Fine Chemical Technologies (Russia), N.S. Kurnakov Institute of General and Inorganic Chemistry (Russia), Institute of Theoretical and Experimental Biophysics (Russia), Institute of Chemical Reagents and High Purity Chemical Substances (Russia), N.N. Blokhin Russian Cancer Research Center (Russia)



November 2019; *Cancer Medicine*

Large retroperitoneal lymphadenopathy and increased risk of venous thromboembolism in patients receiving first-line chemotherapy for metastatic germ cell tumors: A study by the global germ cell cancer group (G3)

Author-affiliated institutions include: Peter MacCallum Cancer Centre (Australia), Tom Baker Cancer Centre (Canada), Hospital Universitario Morales Meseguer (Spain), Royal Marsden Hospital (UK), Princess Margaret Cancer Centre (Canada), N.N. Blokhin Russian Cancer Research Center (Russia), CRTR Rare Tumors Reference Center (Italy)

November 2019; Frontiers in Immunology

Polyoxidonium® Activates Cytotoxic Lymphocyte Responses Through Dendritic Cell Maturation: Clinical Effects in Breast Cancer

Author-affiliated institutions include: University of Montpellier (France), N.N. Blokhin National Oncology Research Center (Russia), Voronezh Oncology Dispensary (Russia)

November 2019; Annals of Oncology

Leukotriene B4 receptors abnormal gene expression is associated with either shorter or longer survival in breast cancer patients depending on the intrinsic tumour molecular subtype

Author-affiliated institutions include: Research Centre for Medical Genetics (Russia), I.M. Sechenov First Moscow State Medical University of the Ministry of Health (Russia), N.N. Blokhin Russian Cancer Research Center (Russia)

November 2019; Annals of Oncology

Clinical application of routine comprehensive tumour molecular profiling in the management of cancer patients

Author-affiliated institutions include: Atlas Oncodiagnostics (Russia), N.N. Blokhin Russian Cancer Research Center (Russia), Moscow Institute of Physics and Technology (Russia)

November 2019; Annals of Oncology

A seven-gene methylation markers panel: An epigenetic predictor of neoadjuvant chemotherapy sensitivity in triple-negative breast cancer

Author-affiliated institutions include: Research Centre for Medical Genetics (Russia), N.N. Blokhin Russian Cancer Research Center (Russia), Ryazan Regional Clinical Oncology Dispensary (Russia)

November 2019; Annals of Oncology

Targeted high-throughput sequencing for somatic mutations identification in thyroid cancer management

Author-affiliated institutions include: Research Centre for Medical Genetics (Russia), PreMed-European Technologies (Russia), Moscow City Clinical Hospital (Russia), N.N. Blokhin Russian Cancer Research Center (Russia)

November 2019; Annals of Oncology

Interim analysis from a phase IIIb, open-label study of afatinib in EGFR TKI-naïve patients (pts) with EGFR mutation-positive (EGFRm+) NSCLC

Author-affiliated institutions include: European Institute of Oncology (Italy), N.N. Blokhin Russian Cancer Research Center (Russia), Petrov Research Institute of Oncology (Russia), Klinik Floridsdorf (Austria), Tel Aviv University (Israel), St John of God Murdoch Hospital (Australia), Ministry of Health of the Republic of Tatarstan (Russia)

November 2019; Annals of Oncology

Activity of afatinib in patients (pts) with EGFR mutation-positive (EGFRm+) NSCLC and baseline brain metastases: Pooled analysis of three large phase IIIb trials

Author-affiliated institutions include: Tel Aviv University (Israel), European Institute of Oncology (Italy), Guangdong Academy of Medical Sciences (China), N.N. Blokhin Russian Cancer Research Center (Russia), Petrov Research Institute of Oncology (Russia), The University of Hong Kong (China), HCG Hospital (India)

November 2019; Annals of Oncology

A phase IIIb, open-label study of afatinib in EGFR TKI-naïve patients with EGFR mutationpositive NSCLC: A biomarker analysis

Author-affiliated institutions include: Quirón Dexeus University Hospital (Spain), Petrov Research Institute of Oncology (Russia), Klinik Floridsdorf (Austria), N.N. Blokhin Russian Cancer Research Center (Russia), Poznan University of Medical Sciences (Poland), Oncology Hospital del Rocío (Spain), University Hospital Brno (Czech Republic), Azienda Ospedaliera Santi Antonio e Biagio e Cesare Arrigo (Italy)

November 2019; Annals of Oncology

Malignant ovarian germ cell tumours (MOGCT): Treatment results of 149 pts Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia)

November 2019; Annals of Oncology

IMbrave150: Efficacy and safety results from a ph III study evaluating atezolizumab (atezo) + bevacizumab (bev) vs sorafenib (Sor) as first treatment (tx) for patients (pts) with unresectable hepatocellular carcinoma (HCC)

Author-affiliated institutions include: National Taiwan University Cancer Center (Taiwan), People's Liberation Army Cancer Center (China), National Cancer Center Hospital East (Japan), University Medical Center Mainz (Germany), Harvard Medical School (USA), N.N. Blokhin Russian Cancer Research Center (Russia), The University of Texas MD Anderson Cancer Center (USA)

November 2019; Annals of Oncology

NGS-based multi-gene panel analysis in early-onset colorectal cancer patients Author-affiliated institutions include: Institute of General Genetics and Cytology (Kazakhstan), Asfendiyarov Kazakh National Medical University (Kazakhstan)

November 2019; Annals of Oncology

Treatment stratification of non-Hodgkin large B-cell lymphoma patients based on the identification of mutational c-MYC gene

Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan)

November 2019; Urologic Oncology: Seminars and Original Investigations

The prognostic impact of different tumor marker levels in nonseminomatous germ cell tumor patients with intermediate prognosis: A registry of the International Global Germ Cell Tumor Collaborative Group (G3)

Author-affiliated institutions include: University Medical Center Hamburg (Germany), Copenhagen University Hospital (Denmark), N.N. Blokhin Russian Cancer Research Center (Russia), Fondazione IRCCS Istituto Nazionale dei Tumori (Italy), Karolinska Institutet and Karolinska University Hospital (Sweden), Lund University Hospital (Sweden), Red Cross Hospital Munich (Germany), Instituto Portugues de Oncologia Francisco Gentil de Lisboa (Portugal), Indiana University School of Medicine (USA)



OCTOBER 2019

October 2019; International Journal of Cancer

Meat intake and risk of gastric cancer in the Stomach cancer Pooling (StoP) project

Author-affiliated institutions include: Instituto de Saúde Pública da Universidade do Porto (Portugal), National Cancer Institute (Italy), University of Ottawa (Canada), Harbin Medical University (China), UCLA Jonsson Comprehensive Cancer Center (USA), National Institute of Public Health (Mexico), N.N. Blokhin Cancer Research Center (Russia), Yale School of Medicine (USA), Tehran University of Medical Sciences (Iran), University at Buffalo (USA)

October 2019; International Journal of Gynecological Cancer

SATEN III- Splitting Adjuvant Treatment into subgroups of stage III endometrioid ENdometrial cancers: An international, multicenter study

Author-affiliated institutions include: Istanbul University-Cerrahpasa (Turkey), N.N. Alexandrov Cancer Center (Belarus), University of Athens (Greece), Grigoriev Institute for Medical Radiology (Ukraine), Kazakh Institute of Oncology and Radiology (Kazakhstan), NAIRI Medical Center (Armenia), Shahid Beheshti University of Medical Sciences (Iran), National Center of Oncology (Azerbaijan), N.N. Petrov Research Institute of Oncology (Russia)

SATEN III - SPLITTING ADJUVANT TREATMENT INTO SUBGROUPS OF STAGE III ENDOMETRIOID ENDOMETRIAL CANCERS: AN INTERNATIONAL, MULTICENTER STUDY

The purpose of this study was to compare adjuvant treatment modalities and to determine prognostic factors in stage III endometrioid endometrial cancer. SATEN III was a retrospective study involving 13 centers from 10 countries, including Eurasian representation from Russia, Kazakhstan, Belarus, Ukraine, and Azerbaijan. Chemoradiation was found to be a better adjuvant treatment option for stage IIIA endometrioid endometrial cancer, while systematic lymphadenectomy improved survival outcomes in stage III endometrioid cancer. This study provided information that is important as to what is the best treatment option for patients with advanced endometrial cancer.



October 2019; Journal of Physics: Conference Series

Mathematical modeling of molecular-genetic systems regulatory mechanisms activity in malignant neoplasms

Author-affiliated institutions include: Tashkent University of Information Technologies (Uzbekistan), Republican Cancer Research Center of the Ministry of Health (Uzbekistan), Tashkent Medical Academy (Uzbekistan)

October 2019; Annals of Oncology

First-line pembrolizumab (pembro) monotherapy for advanced non-clear cell renal cell carcinoma (nccRCC): Updated follow-up for KEYNOTE-427 cohort B

Author-affiliated institutions include: Universitat Autònoma de Barcelona (Spain), University of Ulsan College of Medicine (Republic of Korea), Centrum Onkologii-Instytut im. Marii Sklodowskiej (Poland), Russian Scientific Center of Roentgenoradiology (Russia), N.N. Blokhin Cancer Research Center (Russia), Aarhus University Hospital (Denmark), CHU de Quebec and Laval University, Quebec (Canada), P. A. Herzen Moscow Oncology Research Institute (Russia), Beth Israel Deaconess Medical Center (USA), Georgetown Lombardi Comprehensive Cancer Center (USA)

October 2019; Annals of Oncology

A combined analysis of two phase IIIb studies of afatinib in EGFR TKI-naïve patients (pts) with EGFR mutation-positive (EGFRm+) NSCLC

Author-affiliated institutions include: European Institute of Oncology (Italy), Guangdong Lung Cancer Institute (China), N.N. Blokhin Cancer Research Center (Russia), Jiangsu Cancer Hospital (China), Petrov Research Institute of Oncology (Russia), National Cancer Centre (Singapore), Tel Aviv University (Israel)

October 2019; Annals of Oncology

Prognostic factors in metastatic seminomatous germ cell tumours and elevated human chorionic gonadotrophin (HCG): A study of the G3

Author-affiliated institutions include: UKE Universitätsklinikum Hamburg (Germany), Copenhagen University Hospital (Denmark), University Hopsital Cologne (Germany), N.N. Blokhin Russian Cancer Research Center (Russia), Universitätsspital Zürich (Switzerland), Hospital La Fe (Spain), University Clinic Meloda (Italy)

SEPTEMBER 2019

September 2019; European Journal of Cancer Prevention

Smoking and *Helicobacter pylori* infection: an individual participant pooled analysis (Stomach Cancer Pooling- StoP Project)

Author-affiliated institutions include: EPIUnit – Instituto de Saúde Pública (Portugal), University of Milan (Italy), Department of Health of Madrid (Spain), N.N. Blokhin Cancer Research Center (Russia), UCLA Jonsson Comprehensive Cancer Center (USA), Peking University (China), University of Glasgow (UK)

September 2019; Annals of Oncology

Two-weekly accelerated BEP (aBEP) regimen as induction chemotherapy (CT) in intermediate and poor prognosis patients (pts) with nonseminomatous germ cell tumours (NSGCT): Final results of phase II trial

Author-affiliated institutions include: N.N. Blokhin National Medical Research Center of Oncology (Russia), Sechenov University (Russia)

September 2019; Annals of Oncology

Phase II study: Letrozole maintenance therapy after first line chemotherapy in patients with advanced serous and endometrioid ovarian cancer

Author-affiliated institutions include: N.N. Blokhin Cancer Research Center (Russia)

September 2019; Annals of Oncology

3-year follow-up of a phase III trial comparing the efficacy and safety of neoadjuvant and adjuvant trastuzumab and its biosimilar CT-P6 in HER2 positive early breast cancer (EBC) Author-affiliated institutions include: Imperial College NHS Healthcare Trust (UK), Minsk City Clinical Oncological Dispensary (Belarus), St. Petersburg SBIH City Clinical Oncology Dispensary (Russia), Saint Petersburg Clinical Research Center of Specialized Types of Care (Russia), S. Khechinashvili University Clinic (Georgia), N.N. Alexandrov Research Institute (Belarus), Vinnytsya Regional Clinical Oncology Dispensary (Ukraine), The Oncology Institute (Romania), N.N. Blokhin Russian Cancer Research Center (Russia), NYU Langone Health (USA)

September 2019; Annals of Oncology

Redefining the IGCCCG classification in advanced non-seminoma

Author-affiliated institutions include: The Christie NHS Foundation Trust (UK), European Organisation for Research and Treatment of Cancer (Belgium), Copenhagen University Hospital (Denmark), Erasmus MC Daniel den Hoed Cancer Center (Netherlands), N.N. Blokhin Russian Cancer



Research Center (Russia), Indiana University (USA), Skane University Hospital (Sweden), Memorial Sloan Kettering Cancer Center (USA), St Olav's University Hospital (Norway), Royal Marsden Hospital Institute of Cancer Research (UK)

September 2019; Annals of Oncology

Clinical experience: ramucirumab with FOLFIRI/XELIRI as a second line for patients with metastatic gastric cancer

Author-affiliated institutions include: N.N. Blokhin Cancer Research Center (Russia), City Oncology Hospital (Russia)

September 2019; Annals of Oncology

Primary 2-year (yr) results of a phase 2, multicenter, randomized, open-label trial of efficacy and safety for talimogene laherparepvec (T-VEC) neoadjuvant (neo) treatment (tx) plus surgery (surg) vs surg in patients (pts) with resectable stage IIIB-IVM1a melanoma Author-affiliated institutions include: Universitätsspital Zürich (Switzerland), Olivia Newton-John Cancer Centre (Australia), Huntsman Cancer Institute (USA), University of Alabama (USA), N.N. Blokhin National Medical Research Center of Oncology (Russia), John Wayne Cancer Institute (USA), The University of Texas MD Anderson Cancer Center (USA)

September 2019; Oncology Letters

Multicomponent nutritional supplement Oncoxin and its influence on quality of life and therapy toxicity in patients receiving adjuvant chemotherapy

Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan), Medical University 'Reaviz' (Russia), N.N. Blokhin Cancer Research Center (Russia), Murcia University (Spain), Almaty Oncology Center (Kazakhstan), Khanty-Mansiysk Regional Clinical Hospital (Russia)

AUGUST 2019

August 2019; Frontiers in Genetics

Differentially Expressed Genes Associated With Prognosis in Locally Advanced Lymph Node-Negative Prostate Cancer

Author-affiliated institutions include: Russian Academy of Sciences (Russia), I.M. Sechenov First Moscow State Medical University (Russia)

August 2019; Virchows Arch.

Challenging the prognostic impact of the new WHO and TNM classifications with special emphasis on HPV status in penile carcinoma

Author-affiliated institutions include: University of Saarland (Germany), N.N. Blokhin National Medical Research Center of Oncology (Russia), University Medical Center Göttingen (Germany), University Erlangen-Nuremberg (Germany)

August 2019; Bulletin of Experimental Biology and Medicine

Kidney Injury Molecule-1 (KIM-1) in Blood Plasma of Patients with Clear-Cell Carcinoma Author-affiliated institutions include: N. N. Blokhin National Medical Research Center of Oncology (Russia), A. I. Evdokimov Moscow State University of Medicine and Dentistry (Russia)

August 2019; The Lancet Oncology

Epacadostat plus pembrolizumab versus placebo plus pembrolizumab in patients with unresectable or metastatic melanoma (ECHO-301/KEYNOTE-252): a phase 3, randomised, double-blind study

Author-affiliated institutions include: University of Sydney (Australia), University Hospital Zürich (Switzerland), The Angeles Clinic and Research Institute (USA), University of Chicago Medical

Center (USA), Universidad del Desarrollo (Chile), Cancer Research Center of Lyon (France), Hospital Clínic de Barcelona (Spain), N.N. Blokhin Cancer Research Center (Russia), University of Pennsylvania (USA)

August 2019; Frontiers in Oncology

Mutation Spectrum of Cancer-Associated Genes in Patients With Early Onset of Colorectal Cancer

Author-affiliated institutions include: Institute of General Genetics and Cytology (Kazakhstan), Kazakh Institute of Oncology and Radiology (Kazakhstan), Al-Farabi Kazakh National University (Kazakhstan)

August 2019; Asian Journal of Multidimensional Research

Prognostic significance of Ki67, Bcl2 and p53 in patients with locally advanced cervical cancer Author-affiliated institutions include: Republican Specialized Scientific and Practical Center of Oncology and Radiology (Uzbekistan), Tashkent Institute of Advanced Medical Studies (Uzbekistan)

August 2019; Neuro-Oncology

High incidence of brain metastases in lung cancer patients at the time of primary diagnosis Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia), Lomonosov Moscow State University (Russia), Burdenko Neurosurgical Institute (Russia)

JULY 2019

July 2019; Journal of Neuroscience Methods

A vascular-task response dependency and its application in functional imaging of brain tumors

Author-affiliated institutions include: Weill Cornell Medicine (USA), Memorial Sloan-Kettering Cancer Center (USA), Burdenko Neurosurgery Center (Russia)

July 2019; Iranian Journal of Public Health

Breast Cancer in Megapolises of Kazakhstan: Epidemiological Assessment of Incidence and Mortality

Author-affiliated institutions include: Astana Medical University (Kazakhstan), International High School of Medicine (Kyrgyzstan), Central Asian Cancer Institute (Kazakhstan), Eurasian Institute for Cancer Research (Kyrgyzstan)

JUNE 2019

June 2019; International Journal of Epidemiology

Mendelian Randomization and mediation analysis of leukocyte telomere length and risk of lung and head and neck cancers

Author-affiliated institutions include: Sinai Health System (Canada), Copenhagen University Hospital (Denmark), University of Bristol (UK), National Cancer Institute (USA), Harvard TH Chan School of Public Health (USA), International Agency for Research on Cancer (France), Federico II University (Italy), Hellenic Health Foundation (Greece), N.N. Blokhin Cancer Research Centre (Russia), The University of Texas MD Anderson Cancer Center (USA), University of Oviedo and CIBERESP (Spain), Clalit National Cancer Control Center (Israel), University of North Carolina at Chapel Hill (USA)

June 2019; Cells

Bone Marrow Involvement in Melanoma. Potentials for Detection of Disseminated Tumor Cells and Characterization of Their Subsets by Flow Cytometry

Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia)



June 2019; Annals of Medicine & Surgery

Thoracoscopic thymectomy – The method of choise in surgical treatment of non-invasive thymomas

Author-affiliated institutions include: Moscow Clinical Scientific Center (Russia), N.N. Blokhin Russian Cancer Research Center (Russia)

MAY 2019

May 2019; Journal of Colloid and Interface Science Magnetic liposome design for drug release systems responsive to super-low frequency alternating current magnetic field (AC MF)

Author-affiliated institutions include: Lomonosov Moscow State University (Russia), University of North Carolina at Chapel Hill (USA)

May 2019; The Lancet Oncology

Abiraterone acetate plus prednisone in patients with newly diagnosed high-risk metastatic castration-sensitive prostate cancer (LATITUDE): final overall survival analysis of a randomised, double-blind, phase 3 trial

Author-affiliated institutions include: University of Paris Sud (France), Janssen Research and Development (USA), Instituto de Oncologia de Rosário (Argentina), National Cancer Center Hospital East (Japan), 12 de Octubre University Hospital (Spain), PA Hertsen Moscow Cancer Research Institute (Russia), Istanbul University Cerrahpaşa (Turkey), Fudan University Shanghai Cancer Center (China), Studienpraxis Urologie (Germany), Oxford University Hospitals NHS Foundation Trust (UK)

May 2019; Journal of Bioinformatics and Computational Biology

Bioinformatic identification of differentially expressed genes associated with prognosis of locally advanced lymph node-positive prostate cancer

Author-affiliated institutions include: Engelhardt Institute of Molecular Biology Russian Academy of Sciences (Russia), National Medical Research Radiological Center of the Ministry of Health of the Russian Federation (Russia)

May 2019; The Lancet

Pembrolizumab versus chemotherapy for previously untreated, PD-L1-expressing, locally advanced or metastatic non-small-cell lung cancer (KEYNOTE-042): a randomised, open-label, controlled, phase 3 trial

Author-affiliated institutions include: Chinese University of Hong Kong (China), Guangdong Academy of Medical Sciences (China), Riga East Clinical University (Latvia), Yonsei Cancer Center (South Korea), Istanbul University Cerrahpasa Medical Faculty (Turkey), Instituto do Câncer do Estado de São Paulo (Brazil), Siriraj Hospital (Thailand), N.N. Blokhin Russian Cancer Research Center (Russia), Dnipropetrovsk Medical Academy (Ukraine), Nippon Medical School Hospital (Japan), Sylvester Comprehensive Cancer Center at the University of Miami (USA)

May 2019; European Journal of Gastroenterology & Hematology

Sex differences in the prevalence of *Helicobacter pylori* infection: an individual participant data pooled analysis (StoP Project)

Author-affiliated institutions include: EPIUnit - Instituto de Saúde Pública (Portugal), University of Milan (Italy), University of León (Spain), UNAM (Mexico), Tehran University of Medical Sciences (Iran), N.N. Blokhin Cancer Research Center (Russia), UCLA Jonsson Comprehensive Cancer Center (USA)

May 2019; Journal of Coordination Chemistry

Synthesis, structure and antitumor activity of the binuclear tetranitrosyl iron complex with 2mercaptobenzthiazole – the nitric oxide donor (NO)

Author-affiliated institutions include: N.N. Blokhin Cancer Research Center (Russia), Russian Academy of Sciences (Russia)

May 2019; European Journal of Human Genetics

Sex specific associations in genome wide association analysis of renal cell carcinoma

Author-affiliated institutions include: International Agency for Research on Cancer (France), Imperial College London (UK), Max Planck Institute for Demographic Research (Germany), National Cancer Institute (USA), St. Jude Children's Research Hospital (USA), Russian Academy of Sciences (Russia), Charles University (Czech Republic), University Hospital Clinical Center (Serbia), National Institute of Public Health (Romania), N.N. Blokhin Cancer Research Centre (Russia), Regional Authority of Public Health in BanskaBystrica (Slovakia), National Public Health Institute (Hungary), Institute Gustave Roussy (France), Fred Hutchinson Cancer Research Center (USA), Vanderbilt-Ingram Cancer Center (USA)

May 2019; Journal of Clinical Oncology

Non-interventional study OVATAR final report: Diagnostic and treatment approaches in Russian ovarian cancer population—BRCAm group analysis

Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia), Research Centre for Medical Genetics (Russia), Regional Clinical Oncology Centre (Russia),

May 2019; Journal of Clinical Oncology

Mutational analysis of key genes in patients from the Kazakh population with early onset of breast cancer

Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan)

May 2019; Journal of Clinical Oncology

Analysis of symptoms and functional HRQoL scales in TAGS, a phase III trial of trifluridine/tipiracil (FTD/TPI) in metastatic gastric cancer (mGC)

Author-affiliated institutions include: Vall d'Hebron Institute of Oncology (Spain), National Cancer Center Hospital East (Japan), Omsk Regional Clinical Centre of Oncology (Russia), Christie NHS (UK), Minsk City Clinical Oncology Dispensary (Belarus), N.N. Blokhin Russian Cancer Research Center (Russia), N.N. Alexandrov National Cancer Centre (Belarus), Hacettepe University Cancer Institute (Turkey), Memorial Sloan Kettering Cancer Center (USA)

May 2019; Journal of Clinical Oncology

One-year (yr) recurrence-free survival (RFS) from a randomized, open label phase II study of neoadjuvant (neo) talimogene laherparepvec (T-VEC) plus surgery (surgx) versus surgx for resectable stage IIIB-IVM1a melanoma (MEL)

Author-affiliated institutions include: University Hospital Zürich (Switzerland), Peter MacCallum Cancer Centre (Australia), Sidney Kimmel Cancer Center (USA), N.N. Blokhin Russian Cancer Research Center (Russia), John Wayne Cancer Institute (USA), The University of Texas MD Anderson Cancer Center (USA)

May 2019; Journal of Clinical Oncology

Prognostic and predictive value of an immune-related adverse event among stage III melanoma patients included in the EORTC 1325/KEYNOTE-054 pembrolizumab versus placebo trial

Author-affiliated institutions include: Gustave Roussy Cancer Centre (France), EORTC Headquarters (Belgium), Netherlands Cancer Institute (Netherlands), Papa Giovanni XXIII Cancer Center Hospital (Italy), The University of Sydney (Australia), N.N. Blokhin Russian Oncological Scientific Center (Russia), Hospital Clinic de Barcelona (Spain)



May 2019; Journal of Clinical Oncology

Results of KEYNOTE-240: phase 3 study of pembrolizumab (Pembro) vs best supportive care (BSC) for second line therapy in advanced hepatocellular carcinoma (HCC)

Author-affiliated institutions include: University of California, Los Angeles (USA), Asan Medical Center (South Korea), Lyon University (France), Kindai University (Japan), Service d'Oncologie Medicale (France), N.N. Blokhin Russian Oncological Scientific Center (Russia), Massachusetts General Hospital Cancer Center and Harvard Medical School (USA)

May 2019; Journal of Clinical Oncology

Phase II trial (BCD-100-2/MIRACULUM) of the novel PD-1 inhibitor (BCD-100) in patients with advanced melanoma

Author-affiliated institutions include: CJSC BIOCAD (Russia), N.N. Blokhin Russian Cancer Research Center (Russia), N.N. Petrov Research Institute of Oncology (Russia), JSC Sovremennye Meditsinskie Tekhnologii (Russia), A.I. Kryzhanovsky Krasnoyarsk Regional Clinical Oncology Center (Russia)

May 2019; Journal of Clinical Oncology

Interim analysis of the data of non-interventional study to determine the prevalence of EGFR mutations in advanced NSCLC Russian patients (ORTUS)

Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia), Moscow State Oncology Hospital (Russia), N. N. Petrov Research Institute of Oncology (Russia)

May 2019; Journal of Clinical Oncology

Multicenter observational prospective study of nivolumab (Nivo) as 2+ line treatment in advanced refractory NSCLC pts: Clinical and quality of life outcomes

Author-affiliated institutions include: Saint-Petersburg State University (Russia), N.N. Blokhin Russian Cancer Research Center (Russia), P.A. Hertsen Moscow Oncology Research Institute (Russia), N.N. Petrov Research Institute of Oncology (Russia)

May 2019; Journal of Clinical Oncology

Preoperative conventional axillary ultrasound (AUS) and sonoelastography (SE) for predicting axillary lymph node metastasis in breast cancer patients Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia)

May 2019; Journal of Clinical Oncology

Recurrence-free survival (RFS) and objective response rate (ORR) phase 1/2 study of intralesional (IL) neoadjuvant (neo) anti-PD1 agents (aPD1) for stage IIIB-IV melanoma (MEL) Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia)

May 2019; Journal of Clinical Oncology

First-line pembrolizumab (pembro) monotherapy in advanced clear cell renal cell carcinoma (ccRCC): Updated results for KEYNOTE-427 cohort A

Author-affiliated institutions include: Fred Hutchinson Cancer Research Center (USA), Aarhus University Hospital (Denmark), Asan Medical Center (South Korea), Edinburgh Cancer Centre (UK), P. A. Herzen Moscow Oncology Research Institute (Russia), N.N. Blokhin Russian Cancer Research Center (Russia), Russian Scientific Center of Roentgenoradiology (Russia), Georgetown Lombardi Comprehensive Cancer Center (USA)

May 2019; Journal of Clinical Oncology

Differential regulation of glucocorticoid receptor signaling in luminal, triple negative and HER2+ breast cancer cells

Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia)

APRIL 2019

April 2019; Journal of Molecular Structure

New agent for nitric oxide (NO) chemotherapy: Synthesis and properties of DNIC with hydrazinium cation in solid phase and solutions

Author-affiliated institutions include: Russian Academy of Sciences (Russia), Moscow Region State University (Russia), N.N. Blokhin Russian Cancer Research Center (Russia)

April 2019; Investigational New Drugs

Methionine gamma lyase from *Clostridium sporogenes* increases the anticancer effect of doxorubicin in A549 cells and human cancer xenografts

Author-affiliated institutions include: N.N. Blokhin Cancer Research Center (Russia), State Research Institute of Genetics and Selection of Industrial Microorganisms (Russia)

April 2019; Journal of Clinical Oncology

Final Analysis of the Phase 3 KEYNOTE-042 Study: Pembrolizumab (Pembro) Versus Platinum-Based Chemotherapy (Chemo) as First-Line Therapy for Patients (Pts) With PD-L1-Positive Locally Advanced/Metastatic NSCLC

Author-affiliated institutions include: Chinese University of Hong Kong (USA), Riga East Clinical University (Latvia), The Maria Sklodowska-Curie Memorial Cancer Centre (Poland), Istanbul University Cerrahpasa Medical Faculty (Turkey), Instituto do Câncer do Estado de São Paulo (Brazil), Siriraj Hospital (Thailand), N.N. Blokhin Russian Cancer Research Center (Russia), Dnipropetrovsk Medical Academy (Ukraine), Sylvester Comprehensive Cancer Center at the University of Miami (USA)

MARCH 2019

March 2019; The Lancet Oncology

Addition of radium-223 to abiraterone acetate and prednisone or prednisolone in patients with castration-resistant prostate cancer and bone metastases (ERA 223): a randomised, double-blind, placebo-controlled, phase 3 trial

Author-affiliated institutions include: Massachusetts General Hospital Cancer Center (USA), Royal Marsden NHS Foundation Trust (UK), University of Montreal Hospital Center (Canada), Charité Berlin (Germany), Cliniques Universitaires Saint-Luc (Belgium), National Cancer Centre (Singapore), N.N. Blokhin Russian Cancer Research Center (Russia), Catalan Cancer Institute (Spain), Barretos Cancer Hospital (Brazil), Medical Radiological Research Center (Russia), Nippon Medical School Hospital (Japan), Rabin Medical Center Davidoff Center (Israel), Fred Hutchinson Cancer Research Center (USA)

March 2019; The Lancet Oncology

Ramucirumab with cisplatin and fluoropyrimidine as first-line therapy in patients with metastatic gastric or junctional adenocarcinoma (RAINFALL): a double-blind, randomised, placebo-controlled, phase 3 trial

Author-affiliated institutions include: Smilow Cancer Hospital (USA), National Cancer Center Hospital East (Japan), Fondazione IRCCS Istituto Nazionale Tumori (Italy), Institute of Clinical Cancer Research at Krankenhaus Nordwest (Germany), University Hospitals Gasthuisberg (Belgium), Memorial Sloan Kettering Cancer Center (USA), Vall d'Hebron University Hospital and Institute of Oncology (Spain), Royal Marsden Hospital (UK), Université Paris-Saclay (France), Hospital Universitario Fundacion Favaloro (Buenos Aires), Center for Clinical Care and Research in Oncology (Mexico), N.N. Blokhin Russian Cancer Research Center (Russia), Weill Cornell Medical College (USA)



March 2019; Frontiers in Genetics

Utility of cfDNA Fragmentation Patterns in Designing the Liquid Biopsy Profiling Panels to Improve Their Sensitivity

Author-affiliated institutions include: Moscow Institute of Physics and Technology (Russia), N.N. Blokhin Russian Cancer Research Center (Russia), Atlas Oncology Diagnostics (Russia), George Mason University (USA)

March 2019; European Journal of Cancer

Five-year outcomes from a phase 3 METRIC study in patients with *BRAF* V600 E/K-mutant advanced or metastatic melanoma

Author-affiliated institutions include: Institut Gustave Roussy (France), Massachusetts General Hospital Cancer Center (USA), Mount Vernon Cancer Centre (UK), University of Sydney (Australia), University Medical Center (Germany), N.N. Blokhin Russian Cancer Research Center (Russia), Maria Sklodowska-Curie Institute Oncology Center (Poland)

March 2019; Journal European Science Review

Modern views in diagnostics and treatment of esophageal cancer (literature review) Author-affiliated institutions include: Republican Specialized Scientific and Practical Center of Oncology and Radiology (Uzbekistan), Tashkent Medical Academy (Uzbekistan)

March 2019; The Breast

Efficacy and safety of eribulin in patients with metastatic breast cancer in early and late application: real life experience

Author-affiliated institutions include: N.N. Blokhin Cancer Research Center (Russia), Russian Cancer Scientific Centre (Russia), Kursk Oncology Center (Russia), Tatarstan Cancer Center (Russia)

March 2019; Mendeleev Communications

New design of cationic alkyl glycoglycerolipids toxic to tumor cells

Author-affiliated institutions include: MIREA – Russian Technological University (Russia), N.N. Blokhin Cancer Research Center (Russia), Russian Academy of Sciences (Russia)

March 2019; International Journal of Gynecologic Cancer

BRCA1-associated and sporadic ovarian carcinomas: outcomes of primary cytoreductive surgery or neoadjuvant chemotherapy

Author-affiliated institutions include: N.N. Petrov Institute of Oncology (Russia), St. Petersburg Pediatric Medical University (Russia)

BRCA1-ASSOCIATED AND SPORADIC OVARIAN CARCINOMAS: OUTCOMES OF PRIMARY CYTOREDUCTIVE SURGERY OR NEOADJUVANT CHEMOTHERAPY

This Russian study aimed to compare outcomes of ovarian cancer patients undergoing either primary surgery or interval cytoreduction based on *BRCA1/2* status. In *BRCA1* mutation carriers, the oncologic outcomes were similar when comparing primary surgery versus neoadjuvant chemotherapy. In addition, *BRCA1*-mutation carriers often had a single site of disease when diagnosed with recurrent ovarian cancer. This study evaluated an important question in gynecologic oncology that impacts women globally. It shed light into the impact of BRCA mutations in women with ovarian cancer and how the gynecologic oncology community decide on treatment of patients with this disease.



FEBRUARY 2019

February 2019; Nature Communications

The anti-cancer drugs curaxins target spatial genome organization

Author-affiliated institutions include: Institute of Gene Biology (Russia), Fox Chase Cancer Center (USA), Roswell Park Comprehensive Cancer Center (USA), Lomonosov Moscow State University (Russia)

February 2019; Siberian Journal of Oncology Phenotypic plasticity of metastatic melanoma Author-affiliated institutions include: N.N. Blokhin Cancer Research Center (Russia)

February 2019; Journal European Science Review First-line pembrolizumab (pembro) monotherapy for advanced non-clear cell renal cell carcinoma (nccRCC): Results from KEYNOTE-427 cohort B

Author-affiliated institutions include: Beth Israel Deaconess Medical Center (USA), University of Ulsan College of Medicine (South Korea), Russian Scientific Center of Roentgenoradiology (Russia), N.N. Blokhin Cancer Research Center (Russia), Hospital General Universitari Vall d'Hebron (Spain), Aarhus University Hospital (Denmark), P.A. Herzen Moscow Oncology Research Institute (Russia), Georgetown Lombardi Comprehensive Cancer Center (USA)

February 2019; *Diagnostic Pathology*

Melanoma arising in a Giant congenital melanocytic nevus: two case reports Author-affiliated institutions include: N.N. Blokhin Medical Research Center of Oncology (Russia), Russian Academy of Sciences (Russia)

February 2019; Biochemical and Biophysical Research Communications Inhibition of telomerase activity by splice-switching oligonucleotides targeting the mRNA of the telomerase catalytic subunit affects proliferation of human CD4+ T lymphocytes Author-affiliated institutions include: Peoples' Friendship University of Russia (Russia), N.N. Blokhin Medical Research Center of Oncology (Russia)

February 2019; Journal of Cell Biology

Time-resolved ultrastructure of the cortical actin cytoskeleton in dynamic membrane blebs Author-affiliated institutions include: N.N. Blokhin Medical Research Center of Oncology (Russia), University of Pennsylvania (USA)

February 2019; Biochimie

Endonuclease G modulates the alternative splicing of deoxyribonuclease 1 mRNA in human CD4 + T lymphocytes and prevents the progression of apoptosis

Author-affiliated institutions include: Peoples' Friendship University of Russia (Russia), N.N. Blokhin Medical Research Center of Oncology (Russia)

February 2019; International Journal of Gynecological Cancer

International radical trachelectomy assessment: IRTA study

Author-affiliated institutions include: University of Texas MD Anderson Cancer Center (USA), Memorial Sloan Kettering Cancer Center (USA), Charles University (Czech Republic), Imperial College London (UK), Instituto de Cancerologia de las Americas (Colombia), Hospital Italiano de Buenos Aires (Argentina), IOP Instituto de Oncologia do Parana (Brazil), Karolinska Institutet (Sweden), Fudan University Shanghai Cancer Center (China), University of Medicine and Pharmacy of Târgu Mureş (Romania), Copenhagen University Hospital Rigshospitalet (Denmark), N.N. Petrov Research Institute of Oncology (Russia), Kazahskij Naucno-issledovatel'skij Institut Onkologii i Radiologii (Kazakhstan)



INTERNATIONAL RADICAL TRACHELECTOMY ASSESSMENT: IRTA STUDY

This multi-institution research group represented 13 nations from all over the world, focused on comparing disease-free survival between patients with FIGO (2009) stage IA2 or IB1 (<2cm) cervical cancer who underwent open versus minimally invasive (laparoscopic or robotic) radical trachelectomy. There was no difference in disease-free survival and overall survival in patients undergoing radical trachelectomy when comparing open vs minimally invasive radical trachelectomy. This study helped dictate the best surgical approach for patients with early stage cervical cancer, a disease that is very prevalent in both Russia and around the world, when considering fertility sparing surgery.



February 2019; Organometallics Extending the Application Scope of Organophosphorus(V) Compounds in Palladium(II) Pincer Chemistry

Author-affiliated institutions include: Russian Academy of Sciences (Russia), N.N. Blokhin Russian Cancer Research Center (Russia)

February 2019; Bioconjugate Chemistry

Thiourea Modified Doxorubicin: A Perspective pH-Sensitive Prodrug

Author-affiliated institutions include: Lomonosov Moscow State University (Russia), D. Mendeleev University of Chemical Technology (Russia), A.N. Nesmeyanov Institute of Organoelement Compounds (Russia), Bordeaux University (France)

February 2019; Medical Physics

Raman scattering for dosimetry using GAFCHROMIC EBT3 radiochromic dosimetry film Author-affiliated institutions include: P.N. Lebedev Physical Institute of the RAS (Russia), N.N. Blokhin Russian Cancer Research Center (Russia)

February 2019; Annals of Clinical and Laboratory Research

Giant Scrotal Lymphedema: A Presentation on of Rare Urogenital Disease - A Case Report Author-affiliated institutions include: Republican Specialized Scientific and Practical Center of Oncology and Radiology (Uzbekistan)

February 2019; European Journal of Pharmaceutical and Medical Research Immunological differences three-negative and luminal breast cancer in young patients Author-affiliated institutions include: Republican Specialized Scientific and Practical Center of Oncology and Radiology (Uzbekistan)

February 2019; The European Science Review

Multislice tomography in the comparative assessment of the rate of primary tumor regression against the background of chemoradiation therapy for locally advanced cervical cancer

Author-affiliated institutions include: Republican Specialized Scientific and Practical Center of Oncology and Radiology (Uzbekistan), Tashkent Institute of Advanced Medical Studies (Uzbekistan), Tashkent Medical Academy (Uzbekistan)

February 2019; Annals of Oncology Targeting HIF1a/AP1 in hypoxia by novel 7-amino-6-halogeno-3- phenylquinoxaline-2carbonitrile 1,4-dioxides

Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia)

JANUARY 2019

January 2019; Medical Immunology

Influence of antibodies against CTLA-4 and PD-1 upon quantities of their target receptors Author-affiliated institutions include: N.N. Blokhin Cancer Research Center (Russia), I.M. Sechenov First Moscow State Medical University (Russia)

January 2019; Oncogene

KLF9-dependent ROS regulate melanoma progression in stage-specific manner Author-affiliated institutions include: Roswell Park Cancer Institute (USA), Dana-Farber Cancer Institute (USA), Wake Forest University Comprehensive Cancer Center (USA), Orekhovich Institute of Biomedical Chemistry (Russia), Spanish National Cancer Research Center (CNIO) (Spain)

January 2019; Expert Review of Anticancer Therapy

Defining the toxicity of current regimens for extranodal NK/T cell lymphoma: a systematic review and metaproportion

Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia), Al-Farabi Kazakh National University (Kazakhstan), National Research Tomsk State University (Russia)

January 2019; Case Reports in Oncology

Lack of Response to Imatinib in Melanoma Carrying Rare KIT Mutation p.T632I

Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia), N.N. Petrov National Medical Research Center of Oncology (Russia), St.-Petersburg Pediatric Medical University (Russia), I.I. Mechnikov North-Western Medical University (Russia)

January 2019; Current Medicinal Chemistry

Amino Acid Degrading Enzymes and their Application in Cancer Therapy

Author-affiliated institutions include: N.N. Blokhin Russian Cancer Research Center (Russia), Orekhovich Institute of Biomedical Chemistry (Russia), People's Friendship University (Russia), Sechenov First Moscow State Medical University (Russia), Lomonosov Moscow State University (Russia)

January 2019; PLOS MEDICINE

The influence of obesity-related factors in the etiology of renal cell carcinoma—A mendelian randomization study

Author-affiliated institutions include: International Agency for Research on Cancer (France), National Cancer Institute (USA), Imperial College (UK), St. Jude Children's Research Hospital (USA), The University of Texas MD Anderson Cancer Center (USA), Max Planck Institute for Demographic Research (Germany), Centre National de Genotypage (France), Russian Academy of Sciences (Russia), Kurchatov Scientific Center (Russia), Medical School of Belgrade (Serbia), Mayo Clinic Graduate School of Biomedical Sciences (USA), International Organization for Cancer Prevention and Research (Serbia), Masaryk Memorial Cancer Institute (Czech Republic), N.N. Blokhin Cancer Research Centre (Russia), National Institute for Health and Welfare (Finland)



January 2019; International Journal of Hyperthermia Quality assurance guidelines for interstitial hyperthermia

Author-affiliated institutions include: Chalmers University of Technology (Sweden), University Hospital Erlangen (Germany), Erasmus MC Cancer Institute (Netherlands), N.N. Blokhin Russian Cancer Research Center (Russia), Radio-Onkologie-Zentrum KSA-KSB (Switzerland), Centrum Diagnostyki i Terapii Onkologicznej Nu-Med (Poland), Thomas Jefferson University (USA), University of Maryland Baltimore (USA), University of California, San Francisco (USA)

January 2019; Neuroendocrinology

Unmet Medical Needs in Pulmonary Neuroendocrine (Carcinoid) Neoplasms

Author-affiliated institutions include: Institut Gustave Roussy (France), Royal Free Hospital (UK), University of Lyon (France), University of Torino (Italy), National University of Athens (Greece), The First Affiliated Hospital (China), N.N Blokhin Russian Cancer Research Centre (Russia), Universitätsmedizin Berlin (Germany), Academic Medical Centre (Netherlands), University of Warmia and Mazury (Poland), Uppsala University Hospital (Sweden), Dana-Farber Cancer Institute (USA), Memorial Sloan Kettering Cancer Center (USA), Instituto Fleming (Argentina), Trinity College Dublin (Ireland)

January 2019; International Journal of Surgery Case Reports A case of aggressive giant dermatofibrosarcoma protuberance occurring in the parotid gland

Author-affiliated institutions include: Kazakh Institute of Oncology and Radiology (Kazakhstan)