



The 8th International Clinical Oncology Congress

The 18th Iranian Annual Clinical Oncology Congress

24-26 January 2024

Tehran, Iran

Iranian Society of Radiation (Clinical) Oncology

President of Congress: Dr. Yasha Makhdomi

Scientific Committee Chairperson: Dr. Seyed Mohammad Hosseini

Executive Committee Chairperson: Dr. Sharareh Yazdanfar

Scientific Chairperson of Oncology Nursing: Dr. Salman Barasteh

Scientific Chairperson of Clinical Radiobiology: Dr. Hossein Mozdarani

Scientific Chairperson of Medical Physics: Dr. Mohammad Javad Tahmasebi

Scientific Chairperson of Radiotherapy Technologists: Mr. Nader Sepanlou

Endorsed by[†]
ESTRO



ISCO-ESMO Joint Session
ESMO

Unit # 4, 1st Floor, No # 63, Tousi St.,
Tohid Ave., Tohid Sq., Tehran-IRAN
Tel: 0098 (21) 66567619
Fax: 0098 (21) 66567620

The Eighth International Clinical Oncology Congress

The 18th Iranian Annual Clinical Oncology Congress

24-26 January 2024
Tehran-Iran

Endorsed by
ESTRO



ISCO-ESMO Joint Session
ESMO

President of Congress: Dr. Yasha Makhdomi

Scientific Committee Chairperson: Dr. Seyed Mohammad Hosseini

Executive Committee Chairperson: Dr. Sharareh Yazdanfar

Scientific Chairperson of Oncology Nursing: Dr. Salman Barasteh

Scientific Chairperson of Clinical Radiobiology: Dr. Hossein Mozdarani

Scientific Chairperson of Medical Physics: Dr. Mohammad Javad Tahmasebi

Scientific Chairperson of Radiotherapy Technologists: Mr. Nader Sepanlou

Publisher: MirMah Publishing Co.

Unit # 4, 1st Floor, No # 63, Tousi St., Tohid Ave., Tohid Sq., Tehran-IRAN

Tel: 0098 (21) 66567619

Fax: 0098 (21) 66567620

iscocongress.com

Sponsors





Endorsed by⁷ ISCO-ESMO Joint Session
ESTRO **ESMO**



THE 8TH INTERNATIONAL CLINICAL ONCOLOGY CONGRESS

iscocongress.com



هشتمین کنگره بین‌المللی
رادیوتراپی و تکنولوژی
انکولوژی

۴-۶ بهمن ۱۴۰۲

تهران، درب غربی استادیوم آزادی، هتل المپیک



هجدهمین همایش سالانه کلینیکال انکولوژی ایران
همزمان با همایش فیزیک پزشکی، پرستاری انکولوژی،
کلینیکال رادیوبیولوژی و تکنولوژی پرتودرمانی



Dr. Yasha Makhdomi

President of ISRO and ISCO Congress

The Eighth
International
Clinical
Oncology
Congress



Welcome

8th International Congress and 18th Annual clinical Oncology Conference

The need to exchange information in this field among colleagues, specialists, assistants and students of oncology and other related fields is felt more than ever, as there are rapid developments in systemic treatments (including immunotherapy, target therapy, hormone therapy) and radiotherapy. It is with this aim that **8th International Congress and the 18th Annual clinical Oncology Conference** will be held, to improve the knowledge and skills of cancer diagnostic and treatment groups, increase interdisciplinary interactions, and display the world's latest developments in the field of oncology. In this Congress, with a wide array of panels and lectures and with the presence of related disciplines in the halls and side workshops, the possibility of attendance for many specialists has been provided, including radiation oncologists, gynecologists, gynecological oncologists, general surgeons, oncosurgeons, urologists, Otolaryngologist, neurosurgeons, gastroenterologists, adult hemato-oncologists, pediatric hemato-oncologists, cardio-oncologists, radiotherapy technologists, nurses, medical physicists, and our colleagues in radiobiology and radiotherapy related fields. In line with the inherent mission of the Iranian clinical-oncology association to promote indigenous knowledge and empower the cancer treatment team, all our efforts and plans are focused on displaying the latest scientific findings. During recent years, with contribution from all those involved, specially the scientific and executive committees, the quality and quantity of the scientific programs of the congress has improved, and it is our goal to make the aim of "strengthening and developing scientific relations at the national and international levels to improve the management of cancer " more accessible.

Dr. Yasha Makhdomi

President of the Policymaking Council and
Scientific Association of Radio(clinical) Oncology of Iran

دکتر یاشا مخدومی

رئیس انجمن رادیوانکولوژی و کنگره کلینیکال انکولوژی ایران

هشتمین کنگره بین‌المللی و هجدهمین همایش سالانه کلینیکال انکولوژی

با توجه به پیشرفت‌های چشمگیر و به روزرسانی دانش جهانی در درمان‌های سیستمیک (شامل ایمونوتراپی، تارگت‌تراپی، هورمون‌تراپی) و رادیوتراپی بیماران مبتلا به سرطان، نیاز به تبادل اطلاعات در این زمینه در بین همکاران، متخصصان، دستیاران و دانشجویان انکولوژی و دیگر رشته‌های مرتبط بیش از پیش احساس می‌شود، لذا **هشتمین کنگره بین‌المللی و هجدهمین همایش سالانه کلینیکال انکولوژی** با هدف ارتقا دانش و مهارت گروه‌های تشخیصی درمانی سرطان، افزایش تعاملات بین رشته‌ای، آشنایی با دانش روزآمد دنیا در حوزه انکولوژی برگزار خواهد شد. در هشتمین کنگره بین‌المللی و هجدهمین همایش سالانه کلینیکال انکولوژی با توجه به تعدد و تنوع پانل‌ها و سخنرانی‌ها و با برنامه‌ریزی‌های انجام شده برای حضور رشته‌های مرتبط در سالن‌ها و کارگاه‌های جانبی، امکان حضور برای تمامی متخصصان رادیوانکولوژی، متخصص زنان، فوق تخصص انکولوژی زنان، متخصص جراحی عمومی، فوق تخصص جراحی سرطان، متخصص اورولوژی، متخصص گوش و حلق و بینی، متخصص نوروسرجری، فوق تخصص گوارش و کبد، فوق تخصص هماتولوژی و انکولوژی بزرگسالان، فوق تخصص هماتولوژی و انکولوژی اطفال، کاردیوانکولوژی و بیماری‌های قلب و عروق، تکنولوژیست‌های رادیوتراپی، همکاران رشته‌های پرستاری، فیزیک پزشکی، رادیوبیولوژی و رادیوتراپی فراهم شده است. در راستای مأموریت ذاتی انجمن رادیوانکولوژی ایران مبنی بر ارتقای دانش بومی و توانمندسازی تیم درمان سرطان، تمام تلاش و برنامه‌ریزی‌ها بر این محور است که تازه‌ترین یافته‌های علمی در این کنگره تشریح شود و در طی سال‌های اخیر، با همت و تلاش تمامی دست‌اندرکاران و همچنین کمیته‌های علمی و اجرایی، بر کیفیت و کمیت برنامه‌های علمی کنگره افزوده شده و تلاش همگانی است که اهداف ما از برگزاری برنامه‌های این چنینی همچون تقویت و توسعه روابط علمی در سطح ملی و بین‌المللی برای ارتقای مدیریت بیماری سرطان در دسترس‌تر باشد.

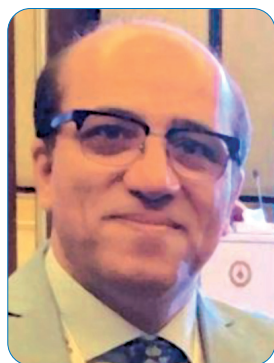
دکتر یاشا مخدومی

رئیس شورای سیاست‌گذاری و رئیس انجمن علمی رادیوانکولوژی ایران

The Eighth
International
Clinical
Oncology
Congress



Welcome



Dr. Seyed Mohammad Hosseini

Scientific Chairperson

The Eighth
International
Clinical
Oncology
Congress



Welcome

In the name of God

The 8th International Congress of Clinical Oncology and the 18th Annual Conference of the Iranian clinical Oncology Society is scheduled to take place on 24-26th January 2024. Over the years, we have seen continuous improvement in the quality and quantity of the scientific programs of the congress, thanks to the dedicated efforts of our members, and the scientific and executive committees. Today we take great pride in announcing that this congress holds a highly esteemed position within the scientific community in Iran.

Given the significant progress and the advancement in the field of oncology, in systemic treatments (including immunotherapy, target therapy, hormone therapy) and radiotherapy, there is an increasing need to exchange information among our colleagues. Accordingly, in this conference, we will learn about Personalized and Precision Medicine, which is currently being utilized in many advanced countries, and set to have a profound impact on our practice in the coming years. Also, to familiarize colleagues with new radiotherapy techniques such as IMRT, VMAT, SRS and SBRT, in addition to using the opinions of domestic clinical oncologists and colleagues, we will have a joint meeting with ESTRO. Similarly, a joint meeting with ESMO will be held to learn about the latest changes in the systemic treatments. Also, in different Multi-Disciplinary panels, Management of various cancers will be reviewed with the participation of cancer treatment team, including oncosurgeons in the fields of general surgery, urology, otolaryngology, neurology, orthopedics, and pathologists, radiologists and hemato-oncologists. Since the radio-oncology community encompasses radiation oncology specialists, medical physicists, radiotherapy technicians, radiobiologists and oncology nurses, each of these colleagues will have separate programs in different halls.

Lastly, we express our gratitude and appreciation to the members of the board of directors of the Iranian clinical Oncology association and the members of the scientific and executive committee of this congress, We sincerely hope that your participation in this event contributes to its scientific depth and magnificence.

Thank You

Dr. Seyed Mohammad Hosseini

Scientific chairperson of the 8th International Congress of Clinical Oncology and the 18th Annual Conference of Clinical Oncology.

دکتر سید محمد حسینی

دبیر علمی کنگره

The Eighth
International
Clinical
Oncology
Congress



Welcome

با نام و یاد خداوند بزرگ

هشتمین کنگره بین‌المللی کلینیکال انکولوژی و هجدهمین همایش سالیانه انجمن رادیوانکولوژی ایران در تاریخ ۴ تا ۶ بهمن ماه ۱۴۰۲ برگزار خواهد شد. در طی این سال‌ها، با همت و تلاش اعضای ادوار مختلف انجمن و همچنین کمیته‌های علمی و اجرایی، سال به سال بر کیفیت و کمیت برنامه‌های علمی کنگره افزوده شده و امروز با افتخار می‌توانیم اعلام کنیم که در بین کنگره‌های علمی که در ایران برگزار می‌شود این کنگره از شأن و منزلت بالایی برخوردار است. با توجه به پیشرفت‌ها و تغییرات شگرفی که در سال‌های اخیر در درمان‌های سیستمیک (شامل ایمونوتراپی، تارگت‌تراپی، هورمون‌تراپی) و رادیوتراپی بیماران مبتلایان به سرطان اتفاق افتاده است نیاز به تبادل اطلاعات در این زمینه در بین همکاران احساس می‌شود. بر این اساس، در این همایش ما با Personalized and Precision Medicine که هم اکنون در بسیاری از کشورهای پیشرفته در حال اجراست و در طی چند سال آینده ما نیز مواجهه بیشتری با این مفهوم خواهیم داشت، آشنا می‌شویم. همچنین جهت آشنایی همکاران با تکنیک‌های جدید رادیوتراپی از جمله IMRT، VMAT، SBRT، علاوه بر استفاده از نظرات اساتید و همکاران رادیوانکولوژیست داخلی، نشست مشترکی با ESTRO خواهیم داشت. بر همین منوال و برای آشنایی با جدیدترین تغییرات در درمان سیستمیک بیماران، نشست مشترک با ESMO برگزار خواهد شد. همچنین در پانل‌های مختلف، Multi-Disciplinary Management، کانسره‌های مختلف را با شرکت همکاران تیم درمان سرطان شامل جراحان سرطان در رشته‌های جراحی عمومی، اورولوژی، گوش و حلق و بینی، مغز و اعصاب، اورتوپدی و همچنین همکاران پاتولوژیست، رادیولوژیست و هماتوانکولوژیست، مرور خواهیم کرد. از آن جایی که جامعه رادیوانکولوژی، علاوه بر متخصصان رادیوانکولوژی، همکاران فیزیک رادیوتراپی، تکنسین‌های رادیوتراپی، رادیوبیولوژیست و پرستاران انکولوژی را در زیر چتر خود دارد، در این برنامه، هریک از این همکاران، برنامه‌های مجزایی را در سالن‌های مختلف خواهند داشت. در پایان ضمن سپاس از اعضای محترم هیأت مدیره انجمن رادیوانکولوژی ایران و اعضای کمیته علمی و اجرایی این کنگره، امیدوارم با شرکت شما سروران گرانقدر در این کنگره، هر چه بیشتر بر غنای علمی و شکوه این کنگره افزوده شود.

با سپاس

دکتر سید محمد حسینی

دبیر علمی هشتمین کنگره بین‌المللی کلینیکال انکولوژی

و هجدهمین همایش سالیانه کلینیکال انکولوژی





Dr. Sharareh Yazdanfar

Executive Chairperson

The Eighth
International
Clinical
Oncology
Congress



Welcome

Greetings,

Every year, congresses and scientific events provide a suitable platform for the exchange of new scientific findings, medical knowledge, and updated information among doctors, specialists, and students in the field of medicine. We are grateful to Almighty God that, just like in previous years, we have the privilege of hosting the 8th International Clinical Oncology Congress on January 24-26, 2024 at the Olympic Hotel in Tehran. These congresses and conferences offer a valuable opportunity to harness the expertise of experienced individuals, as scientific issues and topics are discussed through lectures, specialized panels, and consensus, with experts and colleagues mutually benefiting from these discussions and shared insights.

Cancer, a disease that places a significant financial burden on society, is unfortunately rising among women today. We must acknowledge that if a woman, who serves as the pillar of the family, falls victim to breast cancer, which is the most prevalent form of cancer among women in Iran and other countries worldwide, both the family and society will bear a heavy psychological and economic toll. These costs encompass not only the expenses associated with treatment but also non-therapeutic services of the disease. The disparity between the costs of cancer and other illnesses is substantial. Therefore, it is crucial to raise awareness about the symptoms of cancer in order to prevent it. Additionally, countries should incorporate information, screening, and prevention of cancer into their medical policies.

Lastly, I would like to seize this opportunity to express my heartfelt gratitude to the esteemed members of the Board of Directors of the Iranian Radio-Oncology Association, particularly the Scientific and Executive Committee of the Congress, whose invaluable cooperation has made this event possible. I would also like to extend my appreciation to Dr. Yasha Makhdumi, the president of the association, and Dr. Ali Ghanbari Motlaq, the secretary of the association, for providing speakers, researchers, and attendees with this remarkable opportunity to enhance their knowledge in this field.

Dr. Sharareh Yazdanfar

Executive Chairperson of the Congress.

دکتر شراره یزدان فر

دبیر اجرایی کنگره

The Eighth
International
Clinical
Oncology
Congress



Welcome

به نام خداوند جان آفرین
حکیم سخن در زبان آفرین

خداوند بخشنده دستگیر
کریم خطابخش پوزش پذیر

با عرض سلام و تحیات،

هر ساله کنگره‌ها و رویدادهای علمی زمینه‌های مناسبی را فراهم می‌کنند تا تبادل یافته‌های جدید علمی، دانش پزشکی و اطلاعات به روز دنیا ما بین پزشکان، متخصصین و دانشجویان حوزه سلامت صورت پذیرد. خداوند بلند مرتبه را شاکریم که امسال نیز به سان سال‌های گذشته فرصتی برای برگزاری هشتمین کنگره بین المللی کلینیکال انکولوژی مورخ ۴ تا ۶ بهمن ماه ۱۴۰۲ در هتل المپیک تهران فراهم گردیده است. کنگره‌ها و همایش‌ها این امکان را فراهم می‌آورند که با حضور پیش‌کسوت‌های با تجربه، مسائل و مطالب علمی و موضوعات قابل بحث به شکل سخنرانی، پنل‌های تخصصی و همفکری، مطرح شده و در این میان متخصصان و سایر همکاران بتوانند از این مطالب و هم‌اندیشی‌ها به اندوخته‌ها و تجربیات خود بیفزایند. سرطان نوعی بیماری است که بار مالی بسیار شدیدی به جامعه تحمیل می‌کند. امروزه متاسفانه سرطان در جامعه زنان بسیار شایع شده است. باید بپذیریم که اگر زن به عنوان ستون خانواده به سرطان سینه که شایع‌ترین سرطان در میان زنان ایران و سایر کشورهای جهان می‌باشد، مبتلا شود، ابتدا خانواده و بعد جامعه باید هزینه زیادی در ابعاد روانی و اقتصادی پرداخت نماید. این هزینه‌ها شامل مخارج مستقیم درمانی و غیردرمانی بیماری و داروها و خدمات غیر درمانی می‌باشد که در تمامی موارد اختلاف چشمگیری بین هزینه این بیماری با سایر بیماری‌ها وجود دارد. به همین منظور برای پیشگیری از سرطان باید از علائم آن آگاه بود. همچنین بهتر است کشورها در سیاست‌های پزشکی خود به سمت اطلاع‌رسانی، غربالگری و پیشگیری بیماری سرطان، گام بردارند. در پایان سخن فرصت را غنیمت می‌شمارم تا کمال تشکر خود را از پیگیری و زحمات اعضای محترم هیات مدیره انجمن رادیوانکولوژی ایران، علی‌الخصوص کمیته علمی و اجرایی کنگره که با همکاری ارزشمند خود به برگزاری هر چه بهتر این رویداد کمک نموده‌اند، داشته باشم. همچنین بر خود لازم می‌دانم با ذکر نام از جناب آقایان دکتر یاشا مخدومی رئیس انجمن و دکتر علی قنبری مطلق دبیر انجمن، صمیمانه قدردانی نمایم که هر ساله با برگزاری کنگره محرک ایجاد فضایی برای ترویج هر چه بیشتر علم پزشکی در بین سخنرانان، ارائه‌دهندگان مقالات و مستمعین کنگره می‌شوند..

دکتر شراره یزدان فر

دبیر اجرایی کنگره





Dr. Mohammad Javad Tahmasebi

Scientific Chairperson of Medical Physics

The Eighth
International
Clinical
Oncology
Congress



Welcome

Radiation therapy, also known as radiation oncology, is a cancer treatment method that differs from other medical specialties. While others rely on classical knowledge and experience, this specialty additionally utilizes ionizing radiation using advanced physics and engineering techniques. It involves the collaborative efforts of a specialized team, including an oncologist, qualified physicists, dosimetrists, radiobiologists, and radiation therapy technologists, who continue to deepen their common understanding of the fundamental principles of physics in the interaction of ionizing radiation with living tissues and the corresponding response to these interactions. The joint efforts of the committees in the 8th International Congress of Radio-Oncology are to prepare the common grounds for this understanding so that the participants in this congress can take a higher step in alleviating the pain of patients in this field.

دکتر محمد جواد طهماسبی
رئیس کارگروه بخش فیزیک پزشکی

(Radiation therapy) یا پرتودرمانی به بیان دیگر تومورشناسی تابشی (Radiation oncology) یکی از روش‌های درمان تومورهای سرطانی است که برخلاف سایر رشته‌های تخصصی پزشکی که عمدتاً مبتنی بر دانش کلینیکی و تجربه در تخصص مربوطه است، این تخصص علاوه بر موارد قبلی با به کارگیری پرتوهای یونیزان در درمان تومورهای سرطانی مبتنی بر تکنیک‌های فوق پیشرفته فیزیک و مهندسی و همچنین بر تلاش مشترک یک تیم تخصصی، پزشک آنکولوژیست، فیزیست‌های واجد شرایط (QMP)، دزیمتریست، رادیوبیولوژیست و تکنولوژیست پرتو درمانی (RTT) که بر اساس آموزش‌های تخصصی وسیع در حوزه‌های مربوطه به یک درک مشترک از اصول اساسی فیزیک در برهمکنش پرتوهای یونساز با نسوج حیاتی و همچنین پاسخ متقابل به این برهمکنش‌ها رسیده‌اند متکی است. تلاش مشترک دست‌اندرکاران هشتمین کنگره بین‌المللی رادیوانکولوژی این است که زمینه‌های این فهم مشترک را تا سر حد امکان چنان آماده سازند که خروجی این اجلاس بتواند گامی بلندتر در راستای تسکین آلام بیماران این حوزه سلامت بردارد.

The Eighth
International
Clinical
Oncology
Congress



Welcome



Dr. Hossein Mozdarani

Scientific Chairperson of Clinical Radiobiology

The Eighth
International
Clinical
Oncology
Congress



Welcome

In the name of God

Praise be to God that by his grace and with the efforts and sincere cooperation of the board of directors of the Clinical Oncology Association, we have once again succeeded in holding another conference in the field of clinical radiobiology to serve the respected professors and colleagues and dear students active in the field of radiobiology and clinical oncology of the country. The main purpose of holding this scientific conference, like other conferences that are held, is to update information, exchange views and learn about new developments in the field of radiobiology and the correct use of research findings in clinical conditions. The role of radiobiology in treatment, prevention of the harmful effects of ionizing radiation, follow-up of the treatment process and in many cases prevention of diseases is not hidden from anyone. Over the past decades, the development and use of molecular biology and genetics methods and technology has significantly increased our knowledge of the cellular responses of tumor and healthy cells to radiation and chemotherapy. As a result, and especially with an emphasis on modern radiation oncology, tools for developing personalized treatment strategies and molecular targeting in modern radiation oncology have been and will continue to be provided, to promote tumor response and reduce the effect on healthy tissue.

Over the past three decades, the perspective of radiation damage has changed, from focusing solely on the DNA molecule to considering the role of other biological processes, including the cellular microenvironment, as well as genetic mechanisms. Radiobiological processes including radiation adaptation, neighborhood effect, intrinsic radiosensitivity have changed the classical beliefs of the linear non-threshold model (LNT). While the mechanism of these processes is not well known, their role in radiobiology is beyond imagination. These biological paradigms may play a role in the effect of radiation and chemotherapy. As a result, in modern oncology, the mechanistic perspective derived from molecular radiobiology research provides tools to develop novel personalized therapeutic strategies and molecular targeting, to improve tumor

response and reduce healthy tissue reactions. Currently, our knowledge of the molecular pathways involved in radiation therapy side effects is limited. In recent years, the development of high-performance technologies in molecular biology and genetics has led to obtaining a lot of information at the molecular level, which has led radiobiology to the radiogenomic era. If the findings of omics and radiogenomics are combined, a biological system solution can realize the goal of personalized radiation therapy.

In order to translate basic research findings into clinical application, an ongoing dialogue between basic science researchers and clinical professionals is essential. Therefore, the aim of this conference is to bring together experts from different fields related to radiobiology to discuss the latest achievements in basic and clinical sciences of cancer research.

This conference is the fifth series of clinical radiobiology conferences, which, like the previous conferences, is trying to bring clinical and radiobiology experts closer together in an intimate atmosphere. I, as the scientific secretary of the conference, cordially invite all the distinguished professors, distinguished colleagues active in the field, dear graduates and students of radiobiology, respected residents of clinical oncology and respected experts in radiation therapy and radiation sciences, to present your points of view, as your active participation and warm presence will help us in fulfilling this important responsibility, so that the valuable scientific achievements of the conference can be effective in improving the quality of the use of ionizing radiation in treatment and diagnosis, and the exchange of information can be used in the health sector planning of the country. I hope that with your warm presence, you will contribute to the scientific richness of this congress and by presenting your concerns and views, you will make its scientific discussions more fruitful.

Dr. Hossein Mozdarani

Chairperson of Clinical Radiobiology Working Group
Professor of Tarbiat Modares University, Tehran

The Eighth
International
Clinical
Oncology
Congress



Welcome

دکتر حسین مزارانی

رئیس کارگروه رادیوبیولوژی بالینی

The Eighth
International
Clinical
Oncology
Congress



Welcome

به نام آن که هستی نام از او یافت

سپاس خداوندی را که به عنایت او و با همت و همکاری صمیمانه هیات مدیره محترم انجمن کلینیکال انکولوژی، یکبار دیگر توفیق برگزاری همایشی دیگر در زمینه رادیوبیولوژی بالینی را یافته ایم تا در خدمت اساتید معزز و همکاران محترم و دانشجویان گرامی فعال در حوزه رادیوبیولوژی و کلینیکال انکولوژی کشور باشیم. هدف اصلی از برگزاری این همایش علمی همانند سایر همایش‌هایی که برگزار می‌شود به روز نمودن اطلاعات، تبادل دیدگاه‌ها و آشنایی با پیشرفت‌های جدید در حوزه رادیوبیولوژی و استفاده درست از یافته‌های تحقیقاتی در شرایط بالینی است. نقش رادیوبیولوژی در درمان، پیشگیری از اثرات مضر پرتوهای یونساز، پیگیری روند درمان و در بسیاری از موارد پیشگیری از بروز بیماری‌ها بر کسی پوشیده نیست. طی دهه‌های گذشته، توسعه و استفاده از روش‌ها و تکنولوژی زیست‌شناسی مولکولی و ژنتیک موجب شد تا به طور قابل توجهی دانش ما از پاسخ‌های سلولی سلول‌های تومور و سالم به تشعشع و نیز شیمی‌درمانی افزایش یابد. در نتیجه و به‌ویژه با تاکید بر انکولوژی پرتوی مدرن، دیدگاه‌های مکانیزمی از پژوهش‌های رادیوبیولوژی مولکولی، ابزارهایی را برای توسعه راهکارهای درمان شخصی و هدف‌گیری مولکولی در انکولوژی پرتوی مدرن برای ارتقای پاسخ تومور و کاهش اثر بر بافت سالم را فراهم آورده و در آینده نیز فراهم خواهد کرد. طی سه دهه گذشته دیدگاه آسیب‌های ناشی از تشعشع با محوریت مولکول DNA تغییر کرده است و نقش دیگر فرآیندهای زیستی از جمله ریزمحیط سلولی و نیز مکانیزم‌های ژنتیکی در نظر گرفته می‌شود. رایندهای رادیوبیولوژیکی مانند سازگاری پرتوی، اثر همسایگی، حساسیت پرتوی ذاتی باورهای کلاسیک الگوی خطی غیرآستانه‌ای (LNT) را تغییر داده است. در حالی که مکانیزم رخداد این فرآیندها به خوبی مشخص نیست اما نقش آن‌ها در رادیوبیولوژی فراتر از تصور است. این پارادیم‌های زیستی ممکن است در تاثیر پرتو و شیمی‌درمانی نقش داشته باشند. در نتیجه، در انکولوژی مدرن دیدگاه مکانیستی ناشی از تحقیقات رادیوبیولوژی مولکولی ابزارهایی را فراهم می‌آورد تا راهکارهای نوین درمانی شخصی و هدف‌گیری مولکولی برای بهبود پاسخ تومور و کاهش واکنش‌های بافت سالم توسعه یابد. در حال حاضر دانش ما از مسیرهای مولکولی دخیل در عوارض پرتودرمانی اندک است. در سال‌های اخیر توسعه فن‌آوری‌های



پربازده در زیست‌شناسی مولکولی و ژنتیک موجب حصول اطلاعات بسیار زیادی در سطح مولکولی شده است که رادیوبیولوژی را به دوره رادیوژنومیک سوق داده است. اگر یافته‌های اومیکس و رادیوژنومیک تلفیق شود، یک راهکار سامانه زیستی می‌تواند هدف پرتودرمانی شخصی‌سازی شده را محقق نماید. به منظور ترجمه یافته‌های پژوهش‌های پایه به کاربرد بالینی، گفتمان مداوم بین محققان علوم پایه و متخصصان بالینی ضروری است. از این رو هدف این همایش آن است تا متخصصین از رشته‌های مختلف مرتبط با رادیوبیولوژی را گرد هم آورد تا آخرین دستاوردها در علوم پایه و بالینی تحقیقات سرطان را به بحث بگذارند. این همایش، پنجمین سری از همایش‌های کلینیکال رادیوبیولوژی است که سعی دارد همانند همایش‌های برگزار شده‌ی پیشین موجبات نزدیک‌تر شدن بیش از پیش متخصصان بالینی و رادیوبیولوژی را در فضایی صمیمی فراهم آورد. اینجانب به عنوان دبیر علمی همایش، با افتخار از همه اساتید بزرگوار، همکاران ارجمند فعال در این عرصه مهم علمی و دانش‌آموختگان و دانشجویان عزیز رادیوبیولوژی و رزیدنت‌های محترم کلینیکال انکولوژی، کارشناسان محترم پرتودرمانی و علوم پرتوی دعوت می‌نمایم با ارایه نقطه نظرات و مشارکت فعال و حضور گرم خود ما را در انجام این مسئولیت مهم یاری نموده تا دستاوردهای ارزشمند علمی همایش بتواند در ارتقاء کیفیت استفاده از پرتوهای یونساز در درمان و تشخیص موثر واقع شوند و تبادل اطلاعات در برنامه‌ریزی‌های سلامت کشور مورد استفاده قرار گیرد. امیدوارم با حضور گرم خویش موجب غنای علمی این همایش شده و با طرح مشکلات و دیدگاه‌های خود، باعث هرچه پربارتر شدن بحث‌های علمی آن بشوید.

دکتر حسین مزدارانی

رئیس کارگروه رادیوبیولوژی بالینی
استاد دانشگاه تربیت مدرس



Dr. Salman Barasteh

Scientific Chairperson of Oncology Nursing

The Eighth
International
Clinical
Oncology
Congress



Welcome

Considering the increase in the aging population and the burden of cancer, caring for cancer patients requires the development of theoretical and practical knowledge of health service providers, especially nurses. Care provided by nurses plays an important role in cancer control. In line with cancer control, radiation oncology nurses provide essential care before, during and after radiotherapy. They assess the patient before starting treatment and discuss with the patient about the treatment, possible side effects and management of their disease. The roles of the radiation oncology nurse include patient education, treatment planning and coordination, assessment, symptom management, and supportive and palliative care. In this congress, we are trying to provide the latest knowledge of caring for patients undergoing radiotherapy to interested nurses.

دکتر سلمان برسته

رئیس کارگروه پرستاری انکولوژی

با توجه به افزایش جمعیت سالمندی و بار بیماری سرطان، مراقبت از بیماران مبتلا به سرطان نیز نیازمند توسعه دانش نظری و عملی ارائه دهنده خدمات سلامت به ویژه پرستاران است. مراقبت ارائه شده توسط پرستاران نقش مهمی در کنترل سرطان دارد. لذا در راستای کنترل سرطان، پرستاران رادیوانکولوژی مراقبت‌های ضروری را قبل، حین و بعد از رادیوتراپی ارائه می‌دهند. آنها اقدام به ارزیابی بیمار قبل از شروع درمان می‌کنند و با بیمار در مورد درمان، عوارض جانبی احتمالی و مدیریت بیماری آنها گفتگو می‌کنند. نقش‌های پرستار رادیوانکولوژی شامل آموزش به بیمار، برنامه‌ریزی و هماهنگی درمان، ارزیابی، مدیریت علائم و مراقبت‌های حمایتی و تسکینی است. در این کنگره ما تلاش داریم تا تازه‌ترین دانش مراقبت از بیماران تحت رادیوتراپی را به همکاران پرستاری ارائه کنیم.

The Eighth
International
Clinical
Oncology
Congress



Welcome



Mr. Nader Sepanlo

Scientific Chairperson of Radiotherapy Technologists

The Eighth
International
Clinical
Oncology
Congress



Welcome

Greetings and Regards

Today, we are witnessing rapid technological advances in the field of radiotherapy and the use of advanced technical and biological techniques, striving to optimize and improve the quality of patient care for patients in need.

Arguably, all of this was achieved when engineering and life science scientists formed joint scientific research teams through efforts and cooperation that transcended professional, temporal, and class boundaries. Since radiotherapy is a multidisciplinary science, the need for teamwork and therefore very close and effective cooperation between all relevant scientific disciplines in this field is very important and essential. Therefore, at such meetings, conferences and scientific conferences, efforts are made to collaborate and exchange scientific information and experiences in order to improve the quality of training, management and treatment in clinics. We hope that this year's conference will be an effective step in achieving these main goals by inviting experienced science professors and researchers from various scientific and related fields

Nader Sepanalo

Master of Radiology Engineering

The head of the radiotherapy technologist working group of
Clinical Oncology Congress

نادر سپانلو

رئیس کارگروه تکنولوژی پرتودرمانی

The Eighth
International
Clinical
Oncology
Congress



Welcome

همانطور که همگی شاهد آن هستیم، امروزه در اوج شکوفایی تکنولوژیکی در زمینه رادیوتراپی و استفاده از فن آوری های پیشرفته علوم مهندسی و علوم زیستی در کنار هم، در جهت بهینه سازی و بالابردن هرچه بیشتر کیفیت درمانی بیماران نیازمند، بسر می بریم. بی شک همه این موارد زمانی محقق شده که دانشمندان علوم مهندسی و زیستی با تلاش و همفکری و ایجاد کارگروه های علمی تحقیقاتی مشترک، بدون حد و مرزهای صنفی، زمانی و طبقاتی، به این مهم دست یافته اند. از آنجایی که رادیوتراپی نیز یک علم Multidisciplinary می باشد، لزوم کار گروهی و در نتیجه همفکری و همکاری بسیار نزدیک و موثر تمام طیف های علمی مرتبط در این زمینه، بسیار ضروری و حیاتی می باشد. لذا با گرد همایی ها، همایش ها و کنگره های علمی این چنین، سعی در همفکری و تبادل اطلاعات و تجربیات علمی خود در جهت ارتقاء هر چه بیشتر آموزشی، مدیریتی و کیفیت درمان در کلینیک های درمانی می شود. امید است کنگره امسال نیز با دعوت از اساتید علمی و محققین با تجربه در زمینه های مختلف علمی و مرتبط، گام موثری در جهت تحقق این اهداف بزرگ باشد.

نادر سپانلو

فوق لیسانس مهندسی پرتوپزشکی

مسئول کارگروه کارشناسان رادیوتراپی کنگره کلینیکال آنکولوژی



Clinical Oncology Scientific Committee

Alphabetical

Chair: Dr.Seyed Mohammad Hosseini

Dr. Abdollah Fazlalizadeh
Dr. Ahmad Ameri
Dr. Ahmad Mafi
Dr. Ahmad Mosallayi
Dr. Ali Bagheri
Dr. Ali Emadi Torghabeh
Dr. Ali Kazemian
Dr. Ali Motlagh
Dr. Ali Taghizadeh Kermani
Dr. Ali Yaghoubi Joybari
Dr. Alireza Amou Heydari
Dr. Alireza Naseri
Dr. Alireza Nikoofar
Dr. Amir Anvari
Dr. Amir Mohammad Arefpour
Dr. Arefe Saeedian
Dr. Bahram Mofid
Dr. Cem Onal
Dr. Ehsan Sarayi
Dr. Farhad Samiei
Dr. Farnaz Amozegar Hashemi
Dr. Farshid Arbabi
Dr. Farshid Farhan
Dr. Farzad Taghizadeh Hesari
Dr. Fatemeh Homaei
Dr. Filippo Alongi
Dr. Gholamhossein Noferesti
Dr. Giuseppe Curigliano
Dr. Hadi Molana
Dr. Hamidreza Mirzayi
Dr. Hasan Hamed
Dr. Hojatollah Shahbazian
Dr. Hossein Foudazi
Dr. Hossein Madani
Dr. Jesper Eriksen
Dr. Kazem Anvari
Dr. Khosro Mojir Sheybani
Dr. Mahdi Aghili
Dr. Mansour Ansari
Dr. Maryam Feli
Dr. Masoume Najafi
Dr. Mastaane Sanei
Dr. Mina Tajvidi
Dr. Mitra Ghalibafiyani
Dr. Mohammad Babayi
Dr. Mohammad Hoshiyari

Dr. Mohammad Reza Barzgar
Dr. Mohammad Reza Ghavam Nasiri
Dr. Mona Malekzadeh
Dr. Morteza Tabatabaeifar
Dr. Mustafa Cengiz
Dr. Nehzat Khanjani
Dr. Nima Mousavi
Dr. Pari Ghadamgahi
Dr. Payam Izadpanahi
Dr. Pedram Fadavi
Dr. Pedro C.Lara
Dr. Pegah Sasanpour
Dr. Pouria Adeli
Dr. Reza Ghaletaki
Dr. Reza Khodabakhshi
Dr. Roham Salek
Dr. Rupert Bartasch
Dr. Samira Azghandi
Dr. Sara Farahani
Dr. Sareh Hosseini
Dr. Sasan Razmjou
Dr. Seyed Amir Alle Davoud
Dr. Shole Arvandi
Dr. Simin Hemmati
Dr. Ugur Seleke
Dr. Vincent Gregoire
Dr. Yasha Makhdomi
Dr. Zahra Naderi

Clinical Oncology Executive Committee

Alphabetical

Chair: Dr. Sharareh Yazdanfar

Dr. Alireza Javadinia
Dr. Elham Zarei
Dr. Khatereh Masoumi
Dr. Masoumeh Sajadi Rad
Dr. Maysa Yamralli
Dr. Sara Rasta
Dr. Sima Davoodi
Dr. Soudeh Arastouei
Mrs. Golnaz Zaeri
Mrs. Mahnaz Zaeri

Executive Committee of Oncology Nursing

Alphabetical

Chair: Dr. Maryam Karami

Mr. Amir Mohammad Naimi
Mr. Mehrab Sharifi
Mr. Mohammad Ali Biniaz
Mr. Mohammad Taghi Jafari Mehr
Mrs. Somia Hadavand Mirzaei
Mrs. Zahra Saeedi
Mrs. Zainab Kazemzadeh
Mrs. Sousan Jamshidi

Scientific Committee of Oncology Nursing

Alphabetical

Chair: Dr. Salman Barasteh

Dr. Azam Eshaghian
Dr. Azam Shirinabadi Farahani
Dr. Elahe Ramezanzadeh Tabriz
Dr. Fatemeh Bahramnejad
Dr. Hadis Ashrafizadeh
Dr. Hossein Jabari Beyrami
Dr. Ladan Sedighi
Dr. Leyla Khanali Mojen
Dr. Maryam Elahikhah
Dr. Maryam Karami
Dr. Maryam Katanbaf
Dr. Maryam Rasouli
Dr. Neda Sanaei
Dr. Parand Pourazar Hagh
Dr. Pouneh Pirjani
Dr. Samira Beiranvand
Dr. Seyed Ghasem Mousavi
Dr. Zahra Ebadinejad
Mr. Alireza Abbasi Niasar
Mr. Alireza Farid Khomami
Mr. Amin Nouri
Mr. Amirhossein Taghavi Sangdehi
Mr. Esmaeil Rezaei
Mr. Hamed Savadkouhi
Mr. Mehdi Akbarzadeh Amirdehi
Mr. Saeed Paseban Noghabi
Mrs. Fatemeh Khademi
Mrs. Leyla Angouti Ashnari
Mrs. Mahvash Agahi
Mrs. Mobina Golmohammadi

The Eighth
International
Clinical
Oncology
Congress





Scientific Committee of Medical Physics

Alphabetical

Chair:
Dr. Mohammad Javad Tahmasabi Birgani

Dr. Abul Fazl Nikfarjam
Dr. Akbar Beki Ardakani
Dr. Ali Bagheri
Dr. Ali Divband
Dr. Ali Jomezadeh
Dr. Ali Shabestani Monfared
Dr. Alireza Farajollahi
Dr. Aram Rostami
Dr. Davood Khezerloo
Dr. Fatemeh Mohammadian
Dr. Fatemeh Seif
Dr. Ghazaleh Geraily
Dr. Giuseppe Felici
Dr. Hadi Keivan
Dr. Hamid Gholamhosseinian
Dr. Hasan Ali Nedaie
Dr. Hector Rene Vega Carrillo
Dr. Mahmoud Reza Akbari
Dr. Majid Mohiuddin
Dr. Mehdi Ghorbani
Dr. Mohammad Amin Mosleh Shirazi
Dr. Mohammad Javad Tahmasabi Birgani
Dr. Mohammad Mohammadi
Dr. Mohammad Reza Bayatiani
Dr. Mohsen Bakhshandeh
Dr. Mohsen Saeb
Dr. Nahid Chegeni
Dr. Ramin Jaberi
Dr. Seyyed Masoud Rezaei
Dr. Seyyed Rabi Mahdavi
Mr. Abdul Sattar Khalid
Mr. Javad Ghasemi
Mr. Mohammad Mahdi Khani
Mrs. Behjat Haghighian

Executive Committee of Medical Physics

Alphabetical

Chair: Dr. Nahid Chegeni

Mr. Amirhossein Karimi
Mr. Omid Azadkbakht
Mr. Soheil Elm Talab
Mrs. Azin Fattah Ghazi
Mrs. Mahsa Ejtema
Mrs. Maryam Hazbavi

Scientific Committee of Radiobiology

Alphabetical

Chair: Dr. Hossein Mozdarani

Dr. Abolghasem Haeri
Dr. Abolhasan Rezayian
Dr. Ali Motlagh
Dr. Ali Shabestani Monfared
Dr. Amin Mosleh Shirazi
Dr. Annette Haworth
Dr. Arun Chougule
Dr. E. Ishmael. Parsai
Dr. Farhad Samiei
Dr. Fatemeh Pakniyat
Dr. Hidetaka Arimura
Dr. Hossein Azimian
Dr. Hossein Mozdarani
Dr. Mahdiyeh Salimi
Dr. Mary Joan
Dr. Masoud Najafi
Dr. Mohammad Mohammadi
Dr. Mohsen Cheki
Dr. Mohsen Forughizadeh Moghadam
Dr. Parinaz Mehnati
Dr. Ramin Jaber
Dr. Reza Fardid
Dr. Reza Sadeghi
Dr. Samideh Khoie
Dr. Sara Samiei
Dr. Seyed Mohammad Hosseini
Dr. Seyed Rabi Mahdavi
Dr. Sousan Cheraghi

Executive Committee of Radiotherapy Technologists

Alphabetical

Chair: Mr. Nader Sepanlou

Mr. Mohammad Pedarpour
Mr. Mohsen Masoumi
Mr. Nader Sepanlou

Executive Committee of Radiobiology

Alphabetical

Chair: Dr. Saeed Rezapoor

Dr. Hossein Mozdarani
Dr. Saeed Rezapoor
Mr. Saeed Dabirifar

Scientific Committee of Radiotherapy Technologists

Alphabetical

Chair: Mr. Nader Sepanlou

Dr. Ahmad Reza Sebzari
Dr. Foad Goli Ahmadabad
Dr. Mahdiyeh Dayyani
Dr. Mahnaz Ilkhani
Dr. Maryam Yaftian
Dr. Mitra Ghalibafian
Dr. Somayeh Joolani
Mr. Ali Asgarian
Mr. Amir Hooshang Sedigh
Mr. Mohsen Masoumi
Mr. Nader Sepanlou
Mr. Vahid Shabani
Mrs. Asma Khodadadi
Mrs. Fatemeh Fahimi
Mrs. Fatemeh Partoy Rad
Mrs. Fatemeh Soleymanian
Mrs. Hadis Momeni
Mrs. Hanie Aslani
Mrs. Simin Abbasi
Mrs. Somayyeh Joolani

The Eighth
International
Clinical
Oncology
Congress



Invited International Speakers



Dr. Aram Rostami

- PhD in Medical Physics

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers

Current position:

Senior medical physicist of national center for cancer care and research, Doha, Qatar.

Qualifications:

- PhD of medical physics (2014 -2018)
- Iran university of medical sciences, Tehran, Iran
- MSc of Radiation biology and radiation protection (2011-2014)
- Tehran university of medical sciences, Tehran, Iran
- BSc of Diagnostic Radiology (2007-2011)
- Hamedan university of Medical Sciences. Hamedan, Iran.

Current protocols:

'Optimization of Session Treatment Time in Ethos's Online Adaptive Radiotherapy" funded by a grant from Varian Medical Company.

Latest Publications:

- 1- Comparison of four commercial dose calculation algorithms in different evaluation tests Aram Rostami , Aluisio Jose De Castro Neto, Satheesh Prasad Paloor, Journal of X-Ray Science and Technology -2023.
- 2- Rectal wall sparing effect of a rectal retractor in prostate intensity-modulated radiotherapy H Ghaffari, Aram Rostami, MA Ardekani, B Mofid, SR Mahdavi. Journal of Cancer Research and Therapeutics – 2021.
- 3- Comparison of various common whole pelvic radiotherapy (WPRT) and local radiotherapy (LRT) procedures to treat prostate cancer based on dosimetric parameters SM Rezaei, B Hashemi, B Mofid, M Bakhshandeh, Aram Rostami. International Journal of Radiation Research - 2021.
- 4- Effectiveness of rectal displacement devices during prostate external-beam radiation therapy: A review M Sanei, H Ghaffari, MA Ardekani, SR Mahdavi, B Mofid, Aram Rostami. Journal of Cancer Research and Therapeutics – 2021 .

- 5- Novel treatment setup for urethral carcinoma radiotherapy: A complete response case report SH Molana, Aram Rostami*, B Khajetash, FA Kalati, A Tavakol, H Zandi, Clinical Case Reports - 2020 (*corresponding author)
- 6- Early experiences of establishing telemedicine in the radiotherapy physics department at the time of the COVID-19 outbreak: When less staff is more effective Aram Rostami, M Akbari, SH Molana, M Sanei, FA Kalati, M Tajvidi, Informatics in Medicine Unlocked – 2020.
- 7- Rectal retractor application during image-guided dose-escalated prostate radiotherapy SR Mahdavi, H Ghaffari, B Mofid, Aram Rostami, R Reiazi, L Janani. Strahlentherapie und Onkologie – 2019.
- 8- Use of artificial neural network for pretreatment verification of intensity modulation radiation therapy fields SR Mahdavi, A Tavakol, M Sanei, SH Molana, F Arbabi, Aram Rostami*, The British Journal of Radiology - 2019 (*corresponding author).
- 9- Application of rectal retractor for post-prostatectomy salvage radiotherapy of prostate cancer: a case report and literature H Ghaffari, M Afkhami Ardekani, SH Molana, M Haghparsat, Aram Rostami. Clinical Case Reports – 2019.
- 10- 2D dose reconstruction by artificial neural network for pretreatment verification of IMRT fields SR Mahdavi, M Bakhshandeh, Aram Rostami*. Journal of Medical Imaging and Radiation Sciences - 2018 (*corresponding author).

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers



Dr. Arun Chougule

- Dean and Chief Academic Officer Swasthya Kalyan Group, Jaipur

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers

Dr. Arun Chougule is the Dean & Chief Academic Officer at Swasthya Kalyan Group of Institutes, Jaipur and Ex. Senior Professor and Head of Department of Radiological Physics, SMS Medical College & Hospitals, Jaipur, Ex. Pro Vice Chancellor, Rajasthan University of Health Sciences and Dean Faculty of Paramedical Science, Jaipur India. He has 39 years of professional and teaching experience in medical physics. He is considered as one of the pioneers in radiation experiment dosimetry and radiobiology in India. He has been on many significant positions and member to countless committee and organizations. He is Chair of education and training committee of International Organization of Medical Physics (IOMP), Chairman IOMP Accreditation Board. He is a member of the Board of Directors of the International Medical Physics Certification Board [IMPCB]. Currently he is immediate past President of Asia-Oceania Federation of Organization for Medical Physics (AFOMP) and past President of Association of Medical Physicist of India (AMPI). He has more than 165 publications in national and international journals and has presented more than 380 papers in national and international conferences. He has authored two books and edited 3 books. His research interests include radiation biology, experimental dosimetry in teletherapy, radiation safety and protection in radiology and radiotherapy, QA-QC in Radiology.

He has served as an expert to IAEA and has been regular associate to ICTP for 8 years. He has done a significant work for radiation safety Training programs of VLIR, Belgium, as key resource person for many years. He is recipient of CAS-TWAS, TWAS-UNESCO, APCASOT, UICC fellowships. He has been awarded with numerous awards mainly IOMP-IDMP 2016 for contribution of Medical Physics, AFOMP Member Excellent Presentation Awards, Outstanding Faculty award 2019 SMS Medical College, Govt. of Rajasthan, Dr. Farukh Abdulla Sher – e- Kashmir best researcher award for 2011-12. Recently he has been awarded as AFOMP outstanding medical physicists 2020 for his contribution to Medical Physics education, research, and professional development. His contribution to health sciences is recognised by awarding him a prestigious fellow of National Academy of Medical Sciences- FAMS in 2020. He has been awarded Fellow of IOMP- FIOMP in 2021. Prestigious Prof N.C Singhal Oration award 2019 and Prof L.S. Ramaswamy Oration award 2022.

He is associated with over 27 national and international scientific organizations, Associate editor of 4 international journals and editorial board member of many journals. He is associate with many NGO's working in the field of cancer awareness. He has travelled across the world very widely.



Dr. E. Ishmael Parsai

- Ph. D. in Medical Sciences
(Concentration in Radiation Oncology Physics).
- Professor of Radiation oncology,
University of Toledo Health Science Campus.

Positions:

- Professor of Radiation oncology and Director of Graduate Medical Physics Program and Chief of Medical Physics Division
University of Toledo Health Science Campus (2006– present)
- Oral Examiner; American Board of Radiology (2006 – present)
- Associate Editor, Medical Dosimetry Journal (2023 – present)
- President, Society of Directors of Academic Medical Physics Programs (2018 –2019)
- A member of editorial board for EMITEL, the international Medical Physics Dictionary that has nearly 6000 words translated to some 32 languages. We translated to PERSIAN Language. (2013 – 2017)
- Ph. D. in Medical Sciences (Concentration in Radiation Oncology Physics)
University of Toledo Health Science Campus, Toledo, Ohio. 1995
- Completed requirements (all but dissertation) toward Ph.D. in Nuclear Physics 1988
University of Missouri, Columbia (UMC), & Missouri University Research Reactor (MURR).
Master of Science in Medical Physics, University of Missouri, Columbia, Missouri. 1985
- Master of Science in Nuclear Physics, University of Missouri–Kansas City, Kansas City, Mo. 1983
- B.S. in Electrical Engineering. Kansas State University, Manhattan, Kansas.1980

Current research:

- A Machine Learning Based Planning Quality Evaluation Tool for Radiosurgery of Multiple Intracranial Metastases Treated With Volumetric Modulated Arc Therapy. (April 2020).
- Applications of a Rectal Retractor in Radiotherapy Treatment of Pelvic Tumors. (June 2018).
- Retrospective Analysis of 3–Dimensional Pancreas Matching Based on Bone and Soft–Tissue Alignment. (August 2018).

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers

Published book:

- E. Ishmael Parsai, Ana Isabel Bejarano Buele; "A Practical Guide to Inversely Optimized Treatment Planning"; ISBN hard cover: 978-1-951134-20-4; ISBN eBook: 978-1-951134-21-1; Medical Physics Publishing, in print September 2023.

Awards:

- 2014: Recipient of the College of Medicine and Life Sciences Dean's Award for Excellence in Clinical Research. University of Toledo.
- 2009: Recognition Plaque Awarded at the World Congress for Medical Physics Annual Meeting in Munich for 9 years of Service as the Editor of the Medical Physics World, the IOMP Bulletin

Main inventions and patents:

1. Flattening Filter Free (FFF) Linear Accelerator for Advanced External Beam radiotherapy.
2. Intracavitary Radiation System Description: A New GYN Catheter System for Delivery of High Dose rate Brachytherapy.
3. Unfiltered Radiation Therapy Use of non-uniform photon beam for advanced radiotherapy with the aid of inverse treatment planning system.
4. Expanding Multi-Lumen Applicator Operating Within a Balloon.
5. System for Concurrent Delivery of Thermo Brachytherapy in the Treatment of Cancer.
6. Concurrent Delivery of Interstitial Thermo Brachytherapy (Hyperthermia and Brachytherapy) in Treatment of Cancer.
7. Using Shaped Memory Alloy (SMA) Manufactured From Nitinol material as a Rectal Retractor in Radiation Oncology Applications.
8. Dual Branched Shaped Memory Alloy Organ Positioner to Prevent Damage to Healthy Tissue During Radiation Oncology Treatments.

Latest publications:

1. Taghizadeh, Somayeh, Shvydka, Diana, Shan, A., and Parsai, E. Ishmael; "Optimization and Experimental Characterization of the Innovative Thermo-Brachytherapy Seed for Prostate Cancer Treatment"; Published in Medical Physics, December 2023
2. Salari, Elahheh, Elsamaloty Haitham, Ray, Aniruddha, Mersiha Hadziahmetovic, and Parsai, E. Ishmael; "Differentiating Radiation Necrosis and Metastatic Progression in Brain Tumors Using Radiomics and Machine Learning"; American Journal of Clinical Oncology, Vol. 46 #11:p 486-495, November 2023.
3. Salari, Elahheh, Byrne, Justin, Hadziahmetovic, Mersiha, and Parsai, E. Ishmael; Evaluation of Plan Quality Metrics in Single Isocenter Multiple Targets and Single Isocenter Single Target in the Treatment of Brain Metastases; J Oncology, 3 (1), 1090, May 2023.
4. Akbari, Fatemeh, Taghizadeh, Somayeh, Shvydka, Diana, Sperling, Nicholas, and Parsai, E. Ishmael; "Predicting Electronic Stopping Powers using Stacking Ensemble Machine Learning Method"; Accepted for publication in the Journal of Nuclear Instrumentation and Methods in Physics Research B; January 2023.
5. Salari, Elahheh, Xu, Shuai Kevin, Sperling, Nicholas, Parsai, E. Ishmael; Using Machine Learning to Predict Gamma Passing Rate in Volumetric Modulated Arc Therapy Treatment Plans; Published in Journal of Applied Clinical Medical Physics; December 2022.

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers

6. Xie, Kanru, Shvydka, Diana, Sperling, Nicholas, Salari, Elahheh, and Parsai, E. Ishmael; A Virtual Multi-Featured Single Photon Source and High-Definition Multileaf Collimator for Monte Carlo Modeling of Modern Linac in MCNP5". Submitted to Journal of Technology in Cancer Research & Treatment; May 2022.
7. Saul-McBeth, Jessica, Dillon, John, Launder, Dylan, Hickey Maura, Biswas Priosmita, Salari Elahheh, Parsai, E. Ishmael, Conti, Heather R.; "Radiation Exposure Perturbs IL-17RAMediated Immunity Leading to Changes in Neutrophil Responses That Increase Susceptibility to Oropharyngeal Candidiasis"; Journal of Fungi (MPDI), 8(5), 495; 2022.
8. Parsai, E.I., Salari, E., Shvydka, D., Wan, Jui "Flattened Photon Beams, an Obsolete Feature in Modern LINACS"; International Journal of Radiation Research, Vol 20, #4, October 2022.
9. Salari, E., Parsai, E. Ishmael, Shvydka, D., Sperling, N.; "Evaluation of Parameters Affecting Gamma Passing Rate in Patient-Specific QA's for Multiple Brain Lesions IMRS Treatments" Journal of Clinical Medical Physics, 23(1) e13467, Jan 2022.
10. Saul-McBeth, Jessica, Dillon, John, Kratch, J., Lee, A., Launder, Dylan, Abutaha, E., Williamson, A., Schroering, A., Michalski, G., Biswas, P., Conti, III, S., Shetty, A., McCracken, C., Bruno, V., Parsai, E. Ishmael, and Conti, Heather R.; "Mechanisms of Healing in Oral Mucositis: Surprising Role for IL-17 RA in Regulation of Inflammation"; Frontiers in Immunology, Vol 12, Article 687627, June 2021.

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers



Dr. Mary Joan

- Associate Professor of Radiation Physics Radiological Safety Officer Department of Radiation Oncology Christian Medical College and Hospital Ludhiana, Punjab – 141008 (INDIA).

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers

Current Position:

Associate Professor of Radiation Physics and Radiological Safety Officer, Department of Radiation Oncology, Christian Medical College and Hospital, Ludhiana (INDIA) 26 June 2021- Present.

Professional Experience: 4th October 2008 – Present.

Teaching experience at the doctoral, postgraduate and the undergraduate levels of medical education.

Areas of Competence:

Radiological Physics, Radiotherapy Treatment Planning, Dosimetry, Quality Assurance, Nuclear Medicine, Radiation Protection, Interventional Radiology, Emergency Management

Research Experience, Publications and Achievements:

- Peer reviewer for 10 international journals and one international newsletter
- Co Editor-in-Chief of SCMPCR newsletter
- Editorial Board member of an international journal
- 4 research projects
- 36 publications and 2 book chapters
- 46 invited talks, 72 presentations
- 9 awards, 4 travel grants, 2 best paper awards, 5 best paper nominations
- 93 conferences attended
- Member of 9 professional bodies
- Holding 3 leadership positions in professional bodies
- 4 professional certificate courses completed.

Leadership For Education, Awareness and Capacity Building:

- Organized 34 CME programmes, conferences, workshops, crash courses promoting education in medical physics, awareness and capacity building as Organizing Chairperson, Organizing Secretary, Scientific Committee Chairperson, organizing committee member and scientific committee member.

Professional Community Service:

- 10 cancer and radiation awareness programmes organized for radiation professionals, health professionals, women health professionals and breast cancer screening programme and awareness talks delivered in the local language to the rural girls and women.



Dr. Hector Rene Vega-Carrillo

- Nuclear Engineering

Professor Vega-Carrillo has a large experience in research and teaching in nuclear sciences. Vega-Carrillo's research interests include experimental and computational spectrometry and dosimetry of neutrons and gamma-rays, design of subcritical nuclear reactors using uranium and thorium. He has published more than 200 papers in scientific journals, more than 40 books and more than 400 papers in scientific meetings.

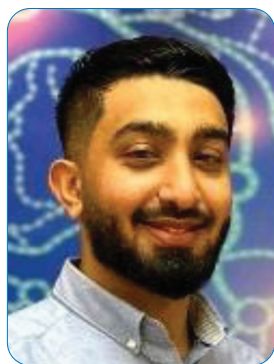
Since 2005 Vega-Carrillo has been the International Scientific Committee and Chairperson of the International Symposium on Solid State Dosimetry (ISSSD). He has been invited professor in universities in Mexico, Spain, Colombia and Peru. Since 1981 he has been faculty member at the Universidad Autonoma de Zacatecas; up to 2023 he was liaison officer by Mexico at the Nuclear Energy Agency. He was co-founder of the Irradiation and Dosimetry Mexican Society (SMID, AC).

Professor Vega-Carrillo is member of the editorial board as managing editor of Applied Radiation and Isotopes and member of the editorial board of Radiation Physics and Engineering and Graduate Journal of Interdisciplinary Research, Reports & Reviews journals. Member of various scientific societies.

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers



Dr. Abdul Sattar Khaled

- Clinical Scientist
The Christie NHS Foundation Trust — Proton Beam
Therapy

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers

Education:

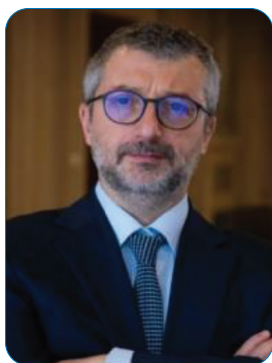
The NHS Scientist Training Programme, United Kingdom (Medical Physics): Registered Medical Physicist 2013 – 2016
The University of Liverpool, United Kingdom – MSc Clinical Science (Medical Physics) 2013 _ 2016
The University of Manchester, United Kingdom– undergraduate Mphys Physics Upper Second Class. 2009 _ 2013

Awards:

- MEFOMP Presenter Award 2023
MEFOMP Conference Oman International Speaker award May 2023
- Medical Physicist of The Year 2022
The National Center for Cancer Care and Research November 2022
- 2nd Best Oral Presentation Award
The 21st Asia–Oceania Congress of Medical Physics 10–12 December 2021
- Medical Physicist of The Year 2021
The National Center for Cancer Care and Research November 2021

Publication:

- Rostami A, Neto AJC, Paloor SP, Khalid AS, Hammoud R. Comparison of four commercial dose calculation algorithms in different evaluation tests. Journal of X-ray Science and Technology. 2023 ;31(5):1013–1033. DOI: 10.3233/xst-230079. PMID: 37393487.



Dr. Giuseppe Felici

- Scientific Director
- Sordina IORT Technologies

Dr. Giuseppe Felici is a medical physicist with dynamic skills in radiotherapy, specifically in the realms of Flash and Spatially Fractionated Radiotherapy. He attained his physics degree from La Sapienza University (Rome), continued on with a Master's course in linac design at Tor Vergata University (Rome), and specialized in Medical Physics at UCSC Gemelli.

He has extensive work experience in the field, being the R&D Manager and Scientific Director at Sordina IORT Technologies S.p.A, has been on the company's Board since 2018.

Since 2020, Felici has held a pivotal role as a member of the International Electrotechnical Commission, dedicated to shaping Medical Linacs Technical Standards. He also became a guest member of the American Association of Physicists in Medicine, dealing with FLASH (ultra-high dose rate) radiation dosimetry. He is also engaged as a stakeholder in the European Project Empire UHDPulse.

Felici has authored more than 40 national and international patents and over 90 scientific publications, with an H-index of 15. He is also the associate Editor of Medical Physics journal.

key Accomplishments:

- Developed a Monte Carlo based software for precise IORT linac dosimetry.
- Designed and patented LIAC HWL technology, enhancing radiation protection for top-tier mobile IORT linacs
- Created the first-ever Treatment Planning System for IORT linacs, enabling 3D imaging via CT and US, along with planification and image guided docking (protected by three patents,
- Designed, engineered and patented the ElectronFlash linac, contributing to the study of the "Flash" Effect in Radiation Therapy.
- Pioneered the IORT Flash medical device, currently pending patent approval
- Designed, tested and validated several Flash dosimeters.
- Successfully secured the EIC Accelerator Grant in 2022 for the 'LIACFlash' project
 - Established a partnership with HEALITALIA and contributed to the winning PEG project as part of the Italian PNRR initiative. First step towards Italian Very High Energy Electrons radiotherapy.

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers



Dr. Vincent Gregoire

- Professor In radiation oncology,
PhD in radiation biology
Léon Bérard Cancer Center, Lyon (France)

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers

Prof. Vincent GREGOIRE graduated as a Medical Doctor (MD) in 1987 from the Université Catholique de Louvain in Belgium. He was board certified in Radiation Oncology in Belgium in 1994 and obtained his PhD in Radiation Biology in 1996 after a fellowship at the Netherlands Cancer Institute in Amsterdam (The Netherlands) and at MD Anderson Cancer Center in Houston (USA). Since his return from the USA, Prof. GREGOIRE was appointed at the Academic Hospital of the Catholic University of Louvain in Brussels (Belgium) where he was the Director of the Center for Molecular Imaging, Oncology and Radiotherapy, Full Professor in Radiation Oncology, and Head of Clinic in the Department of Radiation Oncology. From May 1st 2018, Prof. Vincent GREGOIRE is the Head of the Radiation Oncology Dept. at the Léon Bérard Cancer Center in Lyon (France). He coordinates the Head and Neck Radiation Oncology program where the publication of the consensus guidelines for selection and delineation of target volumes brought him worldwide recognition. Beside his clinical activities, Vincent GREGOIRE has been running a translational research program on tumor microenvironment, on the integration of functional and molecular imaging for treatment planning, and on the molecular basis of increased radiosensitivity in HPV-infected cells. Vincent GREGOIRE has directed or codirected 15 PhD theses and has authored or co-authored more than 330 peer-reviewed publications and 20 book chapters. He has delivered close to 1000 abstract presentations, lectures or teaching seminars worldwide, including award lectures such as the IFHNOS KK Ang lecture in 2014 and the Blair Hesketh BAHNO Memorial Lecture in 2015. He is member of the editorial board of Radiotherapy & Oncology and is a member of numerous scientific societies, including ASTRO and ESTRO, on which he serves on various committees. He has been the President of ESTRO from 2007 to 2009. Vincent GREGOIRE is the past vice-President of the board of EORTC, past-Chairman of the Radiation Oncology Group of the EORTC and of the Head & Neck group of the EORTC. Vincent GREGOIRE was acting chairman of an ICRU Report Committee on "dose prescription, specification and reporting in IMRT". He has been nominated chairman of ICRU in October 2018. In 2008, he was awarded Honorary Fellow of the British Royal College of Radiology, and in 2016 Honorary Fellow of the Irish College of Radiology. In 2014 he received the Breur Award from ESTRO and in 2015, he was awarded Honorary ESTRO Physicist. In 2018, he received the Jens Overgaard legacy award from ESTRO.



Dr. Jesper Grau Eriksen

- Senior consultant at the Department of Oncology and professor at Dept. of Experimental Clinical Oncology Aarhus University Hospital

Jesper Grau Eriksen is 55 years old, graduated from University of Southern Denmark in 1996 and became a specialist in clinical oncology in 2008. He received his PhD in 2004 from University of Aarhus. Present position is as senior consultant at the Department of Oncology in the head and neck cancer team and as professor at Dept. of Experimental Clinical Oncology, both positions at Aarhus University Hospital. He is an active member of the Danish Head and Neck Cancer group (DAHANCA) and board member of the Scandinavian Society of Head and Neck Oncology (SSHNO). He has for many years been involved in post-graduate training on a national and international basis and is at present chair of ESTRO Educational Council and director of the ESTRO School of Radiotherapy and Oncology. Jesper Grau Eriksen's research has all the years focused on clinical and biological aspects of head and neck cancers as well as educational perspectives. He is supervisor of 12 current or former PhD students and he has >150 publications, mostly in peer-reviewed journals with a Scopus H-index of 31. He has >250 conference abstracts as either oral or poster presentations. He received the Professor Carl Krebs Honorary Award in 2017. He is honorary member of the Spanish Society of Radiation Oncology (SEOR) 2017 and recipient of the ESTRO Emmanuel van der Schueren medal 2021. In 2023 he received the European Head and Neck Society (EHNS) Merit Award.

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers



Prof. Pedro Carlos Lara, M.D., Ph.D.

- Radiation/Clinical Oncologist

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers

Actual positions

- Director Canarian Comprehensive Cancer Center, San Roque University Hospital, Las Palmas
- Head of Department of Oncology, Canarian Comprehensive Cancer Center, San Roque University Hospital, Las Palmas,
- Full Professor and Chair Oncology and Radiotherapy Universidad Fernando Pessoa Canarias
- Director Canarian Institute for Cáncer Research
- President Radiation Oncology National Commission, Spanish Government Ministry of Health
- President Radiotherapy & Radiation Oncology Section European Union of Medical Specialties

Education:

- 1985 completion of medical studies at the University of Granada. Spain
- 1988 Ph.D. thesis University of Granada, Spain
- 1990 Radiation/Clinical Oncology specialist Granada University Hospital, Spain

Professional experience/appointments:

- 1983-87 Research student/fellow Oncology Granada University Hospital, Spain
- 1987:1991 Training in Radiation Oncology, Granada University Hospital, Spain
- 1987: Visiting trainee in Instituto de Tumori di Milano, Italy
- 1988: Visiting trainee in MD Anderson Cancer Center, USA
- 1990: Visiting trainee in Academisch Medisch Centrum, The Netherlands
- 1991-2008: Consultant Radiation Oncologist, Las Palmas University Hospital, Spain
- 1991-1995: Associate Professor of Radiation Oncology Las Palmas University, Spain
- 1995 Fellow Traslational Research, NKI, The Netherlands
- 1996: Full Professor of Radiation Oncology, Las Palmas University, Spain.
- 2001-onwards Member Canarian Institute for Cancer Research, Spain
- 2009-2018: Head, Radiation Oncology, Las Palmas University Hospital. Spain
- 2011-2016: President Ethic Committee Las Palmas University Hospital, Spain
- 2011-onwards: Director and Patron Canarian Institute for Cancer Research, Spain
- 2013-2018: Full Professor and Chair of Clinical Oncology and Hematology Las Palmas University, Spain.
- 2015-2021: Director University Oncology Campus, SEOR/Francisco de Vitoria University Madrid Spain.
- 2018-onwards. Full Professor and Chair of Oncology and Radiotherapy Hematology Fernando Pessoa Canarias University ,Spain .

- 2018-onwards. Head, Oncology Dept, San Roque University Hospital. Spain
- 2018-onwards. Director Canarian Comprehensive Cancer Center

Professional membership & associations:

- ASEICA (Spanish Assoc Cancer Research)
2008-12: Board of Directors
- EACR (European Organization for Cancer Research)
2009-Onwards: Member
- ESTRO (European Society for Radiotherapy and Oncology)
2015-to date: ESTRO Grants Committee
2015-to date: ESTRO Clinical Committee Member
2015-to date: ESTRO National Societies Committee Member
2018-onwards: HERO-ESTRO Spain Initiative Member
- EORTC (European Organization for Research and Treatment of Cancer)
2013-to date: EORTC Radiation Oncology, Gynecology, Urology Groups Member
2015-to date: Liason member steering committee GU group
2014: EORTC GYN Group Meeting Las Palmas Local Organizer
2015: EORTC ROG Group Meeting Las Palmas Local Organizer
2017: EORTC GU Group Meeting Las Palmas Local Organizer
SEOR (Spanish Society Radiation Oncology)
2013-2015: SEOR Vice-president
2015-17: SEOR President
2017-2019: SEOR: Past President
2017-2021: Director Oncology University Campus SEOR//Fancisco de Vitoria University.
- SEOC: (Spanish Society Clinical Oncology)
2015-Onwards: SEOC. Founder
2015-Onwards: SEOC. Secretary
- FESEO (Spanish Federation of Oncological Societies)
2017-2019. Vice-president
- Spanish Government Ministry of Health,
2018-onwards. President Radiation Oncology National Commission
- UEMS (European Union of Medical Specialties)
2016-Onwards: UEMS Spanish representative Radiation/Clinical Oncology
2018-Onwards. President UEMS Radiation/Clinical Oncology Group

Research:

- (Pubmed Lara PC, also Lara P, Lara-Jimenez, PC) H Index Web Of Science: 27
- > 100 indexed publications
 - > 300 Meeting participations
 - 12 PhD students promoted
- Member of the editorial board of Radiation Oncology, Reports of Practical Oncology and Radiotherapy, Clinical Traslational Oncology and Clinical and Traslational Radiation Oncology journals. He is actively publishing and reviewing scientific articles for several journals and participating in national and international scientific, educational and research meetings.

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers





Fossati Piero

- Full professor of Radiation Oncology
Karl Landsteiner Medical University, Krems, Österreich

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers

Education

- 1991-1997: "La Sapienza" University of Rome - Electronic Engineering, Rome, Italy
- 1997-2002: "La Sapienza" University of Rome – Medicine and Surgery, Rome, Italy
- 2002 – 2006: University of Milan – Residency in radiation oncology, Milan, Italy

Clinical and scientific activity

- Jan 1998 – Apr 1998: Istituto superiore di sanità, Rome, Italy- Researcher
- Nov 2006 – Oct 2009: University of Milan – Medicine and Surgery, Milan, Italy
- Research fellowship on project : "precision radiotherapy and hadrontherapy. Image guided radiotherapy (IGRT) techniques implementation"
- Nov 2009 – Jul 2017 University of Milan – Medicine and Surgery, Milan, Italy
Full time employment as researcher
- Oct 2005 – Jul 2017: Fondazione CNAO, Milan, Italy
Scientific and clinical cooperation with CNAO Foundation
- Nov 2006 –Aug 2007: CDI (Centro Diagnostico Integrato), Milan, Italy
Cooperation with the 'Cyberknife' department for clinical trials design
- Jan 2012- Jul 2017: European Institute of Oncology, Milan, Italy
Member of radiation oncology department clinical staff
- Oct 2017- Present: EBG MedAustron GMBH, Wiener Neustadt, Österreich
Scientific Director, Director of the Carbon Ion Program
- Oct 2022- Present: Karl Landsteiner Medical University, Krems, Österreich
Full professor of Radiation Oncology

International cooperation:

- Sep 2007 – Dec 2007: National institute of Radiological Science, Chiba, Japan
Fellow at the hadrontherapy department
- Apr 2009 –Aug 2009: National institute of Radiological Sciences, Chiba, Japan
Fellow at the hadrontherapy department
- Mar 2012 –Nov 2012 Belgian Hadron Therapy Center, Brussels, Belgium
Member of the international experts group
- Oct 2014 – May 2015 Member of the "experts group", co-author of the IAEA report on "Particle Therapy in 21st Century: Relevance to Developing Countries", Austria
- Nov 2016 – present Chairman of the scientific advisory board of WPE (West

German Proton Therapy Centre in Essen), Essen, Germany

- Jan 2016 – April 2020 External supervisor in the PhD program of the Faculty of Medicine and Dentistry, University of Bergen, and Haukeland University Hospital on the topic: “Accuracy of clinical dosing of carbon ion radiation”, Bergen, Norway
- 2016 – 2019 Member of the ICRU (International Commission on Radiation Units and Measurements) report committee 22 and co-author of the ICRU Report 93 on “ Prescribing, Recording, and Reporting Light Ion Beam Therapy “

Clinical trials

- Apr 2016 – present: Co-Principal Investigator of the trial: “SACRO Sacral Chordoma: Surgery Versus Definitive Radiation Therapy in Primary Localized Disease”(accruing)
- Apr 2020- present: Principal Investigator of the prospective phase II trial “PARC: Preoperative, proton- radiotherapy combined with chemotherapy for borderline resectable pancreatic cancer” (accruing)
- August 2021- present: Principal Investigator of the prospective phase II trial “ Phase II Trial of Hypo-fractionated Highly Conformal Radiotherapy for Locally Advanced Pancreatic Carcinomas” (accruing)

Latest Publications:

- Tubin S, Fossati P, Mock U, Lütgendorf-Caucig C, Flechl B, Pelak M, Georg P, Fussl C, Carlino A, Stock M, Hug E. Proton or Carbon Ion Therapy for Skull Base Chordoma: Rationale and First Analysis of a Mono-Institutional Experience. *Cancers (Basel)*. 2023 Mar 31;15(7):2093. doi: 10.3390/cancers15072093. PMID: 37046752; PMCID: PMC10093149.
- Hoppe BS, Petersen IA, Wilke BK, DeWees TA, Imai R, Hug EB, Fiore MR, Debus J, Fossati P, Yamada S, Orlandi E, Zhang Q, Bao C, Seidensaal K, May BC, Harrell AC, Houdek MT, Vallow LA, Rose PS, Haddock MG, Ashman JB, Goulding KA, Attia S, Krishnan S, Mahajan A, Foote RL, Laack NN, Keole SR, Beltran CJ, Welch EM, Karim M, Ahmed SK. Pragmatic, Prospective Comparative Effectiveness Trial of Carbon Ion Therapy, Surgery, and Proton Therapy for the Management of Pelvic Sarcomas (Soft Tissue/Bone) Involving the Bone: The PROSPER Study Rationale and Design. *Cancers (Basel)*. 2023 Mar 8;15(6):1660.
- Schafasand M, Resch AF, Traneus E, Glimelius L, Fossati P, Stock M, Gora J, Georg D, Carlino A. Technical note: In silico benchmarking of the linear energy transfer-based functionalities for carbon ion beams in a commercial treatment planning system. *Med Phys*. 2023 Mar;50(3):1871-1878. Flechl B, Konrath L, Hug E, Fossati P, Lütgendorf-Caucig C, Achtaewa M, Pelak M, Georg P. Meningioma WHO I with involvement of the optical structures-does proton therapy lead to changes in quality of life with regard to subjective visual performance? *Strahlenther Onkol*. 2023 Apr;199(4):404-411.
- Lütgendorf-Caucig C, Pelak M, Flechl B, Georg P, Fossati P, Stock M, Traub- Weidinger T, Marosi C, Haberler C, Zechmeister-Machhart G, Hermsmeyer L, Hug E, Staudenherz A. The trends and significance of SSTR PET/CT added to MRI in follow-up imaging of low-grade meningioma treated with fractionated proton therapy. *Strahlenther Onkol*. 2023 Apr;199(4):396-403.
- Pelak MJ, Flechl B, Hug E, Galalae R, Konrath L, Góra J, Fossati P, Lütgendorf-Caucig C, Tubin S, Konstantinovic R, Mock U, Fussl C, Georg P. Normofractionated and

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers



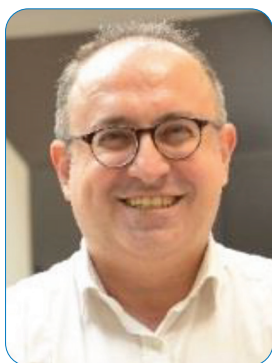
moderately hypofractionated proton therapy: comparison of acute toxicity and early quality of life outcomes. *Front Oncol.* 2022 Aug 16;12:962697.

- Grosshagauer S, Fossati P, Schafasand M, Carlino A, Poljanc K, Radakovits T, Stock M, Hug E, Georg P, Pelak M, Góra J. Organs at risk dose constraints in carbon ion radiotherapy at MedAustron: Translations between LEM and MKM RBE models and preliminary clinical results. *Radiother Oncol.* 2022 Oct;175:73-78.
- Knäusl B, Kuess P, Stock M, Georg D, Fossati P, Georg P, Zimmermann L. Possibilities and challenges when using synthetic computed tomography in an adaptive carbon-ion treatment workflow. *Z Med Phys.* 2022 Jun 25:S0939-3889(22)00064-2.
- Tubin S, Fossati P, Carlino A, Martino G, Gora J, Stock M, Hug E. Novel Carbon Ion and Proton Partial Irradiation of Recurrent Unresectable Bulky Tumors (Particle-PATHY): Early Indication of Effectiveness and Safety. *Cancers (Basel).* 2022 Apr 29;14(9):2232.
- Resch AF, Schafasand M, Lackner N, Niessen T, Beck S, Elia A, Boersma D, Grevillot L, Fossati P, Glimelius L, Stock M, Georg D, Carlino A. Technical note: Impact of beamline-specific particle energy spectra on clinical plans in carbon ion beam therapy. *Med Phys.* 2022 Jun;49(6):4092-4098.
- Hug Eugen Boris, Pelak Maciej, Frank Steven Jay, Fossati Piero. A Review of Particle Therapy for Skull Base Tumors: Modern Considerations and Future Directions. *Int J Part Ther.* 2021 Jun 25;8(1):168-178.

**The Eighth
International
Clinical
Oncology
Congress**



**Invited
International
Speakers**



Dr. Cem Onal

- Professor & Chair
Baskent University Faculty of Medicine,
Adana Dr. Turgut Noyan Research and Treatment Centre,

Prof Cem Onal is the founder physician of the Radiation Oncology Department at Baskent University Adana Dr Turgut Noyan Research and Treatment Center, where he also serves as Chair and Professor. Prof Onal earned his medical degree from Hacettepe University Medical School in Ankara, Turkey in 1999 and completed his residency in radiation oncology at Hacettepe University School of Medicine in Ankara in 2004. He established Radiation Oncology units in 2006 in Adana, 2017 in Iskenderun, and 2020 in Ankara. Prostate cancer, breast cancer, and gynecological malignancies are his primary areas of interest. He has extensive experience treating prostate cancer with intensity modulated radiotherapy and image guided radiotherapy, as well as brachytherapy for gynecological tumors, stereotactic radiotherapy, and radiosurgery. He is the director of the MR-Linac unit and has extensive experience using MR-Linac to treat prostate cancer and abdominal tumors. He also has extensive experience with computed tomography-guided brachytherapy, intensity modulated radiotherapy, image-guided radiotherapy, stereotactic body radiotherapy/radiosurgery, and helical tomotherapy. He has more than 200 publications in international and national journals. Additionally, he has over 380 international and national abstracts that have been presented at various scientific meetings. He serves as a peer reviewer for 100 journals. He lectures on new radiotherapy facilities in national and international course programs.

The Eighth
International
Clinical
Oncology
Congress



Invited
International
Speakers



Giuseppe Curigliano

- M.D. Ph.D. Full Professor of Medical Oncology
University of Milano

The Eighth
International
Clinical
Oncology
Congress



Giuseppe Curigliano, M.D. Ph.D. is a distinguished Full Professor of Medical Oncology at the University of Milano. He serves as the Head of the Division of Early Drug Development at the European Institute of Oncology in Milan and is a Fellow of the European Academy of Cancer Sciences. With a strong focus on translational cancer research, he has made significant contributions to clinical practice guidelines and treatment strategies, especially for breast cancer. Identified as Clarivate™ world's most influential researchers in 2022, Dr. Curigliano has published numerous research articles and editorials, and is mainly active within clinical trials with strong translational research. One of his current projects aims to identify a new potential tool for a better selection of high-risk patients eligible for post neoadjuvant investigational drugs and a new surrogate for neoadjuvant drug efficacy for TNBC, by evaluating magnitude of lymphocytic infiltration in the residual disease after NACT. As a member of the scientific advisory board of the BIG and ESMO, he is actively involved in the "Developing Countries Task Force", aimed to develop academic clinical research within India to build an internationally competitive clinical research network. He also has established active collaborations with cancer centers in Argentina, Brazil, Egypt and Libia.

Education:

- 1993: Medical degrees with Summa cum laude honours from Università Cattolica del Sacro Cuore, Policlinico Gemelli, Roma
- 1998: Specialist Qualification with honours in Medical Oncology from Università Cattolica del Sacro Cuore, Policlinico Gemelli, Roma
- 2006: PhD with Summa cum laude honours in Clinical Pharmacology from Università di Pisa
- 2012: MSc with Summa cum laude honours in Health Management from Università Cattolica del Sacro Cuore, Milano

Editorial Board Member:

- ESMO Open (Editor in Chief)
- Cancer Treatment Review (Co-Editor in Chief)
- The Breast (Co-Editor in Chief)
- European Journal of Cancer (Associate Editor for Breast Cancer Section)

- Current Opinion in Oncology (Associate Editor for Breast Cancer Section)
- The Oncologist (Associate Editor for Breast Cancer Section)
- Cardio-Oncology (Associate Editor)
- Journal of Clinical Oncology (Breast Cancer Editor)
- Annals of Oncology (Breast Cancer Editor)
- OncoReview (Associate Editor)
- Current Opinion in Oncology (Associate Editor for Breast Cancer Section)
- Breast Cancer Research and Treatment (Medical Oncology Editor)

The Eighth
International
Clinical
Oncology
Congress





Annete Haworth

- Director, Institute of Medical Physics, School of Physics
- Director, postgraduate Medical Physics programme
- University of Sydney

The Eighth
International
Clinical
Oncology
Congress



I am an ACPSEM certified medical physicist (Registration number R00005), accredited in Radiation Oncology Medical Physicist and have more than 25 years clinical and research experience. My PhD (awarded with distinction) involved development of bio-effect models in prostate cancer radiotherapy. After developing the first Australian program for prostate cancer therapy with permanently-implanted radioactive seeds, I maintained a focus on prostate cancer radiotherapy, and in 2010-2014 successfully lead a PdCCRS funded project to further develop the bioeffect model for focal brachytherapy, establish imaging protocols to extract data to inform the model and develop software to automate treatment planning for brachytherapy and external beam radiation therapy using the bio-effect model. I lead a research team with multiple national and international collaborations, 5 post-doctoral fellows and 12 PhD students. I have received several competitive grants including an NHMRC project grant (2016) to further the development of the "BiRT" project. The BiRT project will develop imaging biomarkers to provide quantitative tumour characteristic descriptors to inform a biological model for radiotherapy treatment planning and treatment response in multiple tumor site including prostate, liver, colorectal cancer and breast. I have had significant involvement in the design, management and quality assurance of clinical trials. I am a Life Member of TROG, and member of the Board of Directors. I was a member of the Scientific Committee for 10 years and have led the QA program for several trials. I am the principal investigator for the SI-BiRT (sequential imaging in biofocussed radiotherapy) clinical trials (ANZCTR UTN U1111-1221-9589). Since August 2023 I have taken on the conjoint role of Director, Radiation Oncology Medical Physics at Westmead and Blacktown Hospitals. The service provides a full range of high-quality radiation therapy treatments with a team that is actively engaged in further developing its reputation as a world leader in radiation oncology related research and development.

Education:

- 2005: PhD, awarded with distinction, University of Western Australia.
Subject of thesis: post implant dosimetry and evaluation of implant quality in I-125 prostate implants
- 1997: MSc by research, University of Western Australia.

Subject of thesis: Investigation, dosimetry and optimisation of dose delivery techniques for total body irradiation

- 1981: BSc (Hons) in Physics, Leeds University (UK).

Book chapters:

1. Annette Haworth and Geoffrey Ibbot. Medical Physics for Clinical Trials. Modern Technology of Radiation Oncology, Volume 3 (Ed.: J Van Dyk) Chapter 15. Medical Physics Publishing, Wisconsin 2013, ISBN 978-1-930524-57-6, pp. 487-511.
2. Tomas Kron and Annette Haworth (editors). Proceedings of the XVII International Conference on the Use of Computers in Radiation Therapy (ICCR 2013), 6–9 May 2013, Melbourne, Australia. Journal of Physics: Conference Series 489 (2014)
3. Wong JHD, Haworth A, Marques da Silva AM et al. Medical Physics During the COVID-19 Pandemic (Ed: KH Ng and MS Stoeva) Chapter 5. CRC Press 2021 , ISBN: 978-0-367-69375-6 pp. 36-46
4. IAEA Training Course series 56(Rev.1) Postgraduate Medical Physics Academic Programmes IAEA, Vienna, 2021 ISSN 1018–5518. Expert consultant for contribution and review.

The Eighth
International
Clinical
Oncology
Congress





Akbar Beiki-Ardakani

- Clinical Physicist,
- Princess Margaret Hospital, Toronto, Canada

The Eighth
International
Clinical
Oncology
Congress



Education:

- Clinical Physicist Residency program at Princess Margaret Hospital (Jan 2004 – Dec 2005).
- Radiation Science Program, Radiation Therapy, Michener Institute and University of Toronto (1999-2000).
- Satisfied all courses required for Ph.D program in Physics, Shiraz University, Shiraz, Iran (1988-92).
- M.Sc. in Applied Physics & Astrophysics, Shiraz University, Shiraz, Iran (1984-87).
- B.Sc. in Physics, Shiraz University, Shiraz, Iran (1979-84).

Latest research and projects:

- Asymmetric Loading of Radioactive ¹²⁵Iodine Plaques in the Treatment of Uveal Melanoma (Presented at International society of Ocular Oncology Biennial conference 24-28 March 2017 Sydney Australia, Presented by Wantanee Dangboon)
- Commissioning of Pinnacle TPS for Eyeplaque planning, 2017
- CT Imaging for Penile Brachytherapy, (presented at ASTRO 2014, San Francisco, US)
- MR-based rectal applicator reconstruction in HDR rectal brachytherapy, (presented at ESTRO 2012 Barcelona, Spain)
- Catheter position validation using online x-ray guidance for MRI-based HDR prostate brachytherapy with J. Abed and et al (presented at 17th ISRRT World Congress and the 70th CAMRT Annual General Conference to be held in Toronto, June 7-10, 2012).
- Retrorespective study of uniformly loaded plaque in Juxtapapillary Choroidal Melanoma to re-evaluate minimum tumor margin dose requires in COMS protocol (presented in AAPM 2010, Philadelphia)
- Technique for Accurate GTV Definition in MR-Guided HDR Prostate Brachytherapy with Jenny Lee, M.Math, Kristy Brock, Ph.D, and other (presented at ABS 2010 Chicago, USA)
- Improving Quality assurance for COMS eye plaque using pinhole gamma camera. An imaging technique and an exposure rate technique has been proposed to enhance the quality assurance for EPT by detecting discrepancy in seed loading due to human error or other factors (. Med. Phys. 35 „10..., October 2008).



- Verification and performance testing of IGTX in delivery of junction fields using polymer gel. Two tests have been performed on this subject and results show IGRT has same accuracy as conventional laser set up for junction delivery (The results for this project presented at IOMP 2005 Germany and DRO Research Day, Toronto 2005).

Latest publications:

- M. Arjmand, F Ghassemi , P. rafiepour, H. Poorbaygi, A. Beiki-ardakani, et al, “ Dosimetric Investigation of Six Ru-106 Eye Plaques by EBT3 Radiochromic Films and Monte Carlo Simulation”, J Biomed Phys Eng, 2022/1/19
- Ghassemi F, Sheibani S, Arjmand M, Poorbaygi H, Kouhestani E, Sabour S, Samiei F, Beiki-Ardakani A, Jabarvand M, Sadeghi Tari A. “Comparison of Iodide-125 and Ruthenium-106 Brachytherapy in the Treatment of Choroidal Melanomas” Journal of Clinical Optthalmology. Vol 14, 2020 Feb, P 339-346
- Weersink RA, Patterson S, Ballantyne H, Di Tomasso A, Borg J, Vitkin A, Rink A, Beiki-Ardakani A. “An improved treatment planning and quality assurance process for Collaborative Ocular Melanoma Study eye plaque brachytherapy”. Brachytherapy. 2019 Jun 21
- Rachel Gerber, A. Rink, J. Croke, J. Borg, Akbar Beiki-ardakani, “Comparison of dosimetric parameters derived from whole organ and wall contours for bladder and rectum in cervical cancer patients treated with intracavitary and interstitial brachytherapy”,. Radionther Oncol. 2018 Jun;127(3):456-459
- J. Skliarenko, M. Carlone, K. Tanderup, M. Milosevic, Akbar Beiki-ardakani, et all. “Technique adaptation, strategic replanning, and team learning during implementation of MR-guided brachytherapy for cervical cancer”, Brachytherapy, 2018 Jan-Feb; 17(1):86-93
- Jessica Convett, Kathy Han, Rachel Gerber, Akbar beiki-ardakani, et al. “Patient-reported sexual adjustment after definitive chemoradiation and MR-guided brachytherapy for cervical cancer”. Brachytherapy 2019 Mar-Apr;18(2):133-140
- Sanmamed N, Berlin A, Beiki-Ardakani A, Ballantyne H, Simeonov A, Chung P. “Magnetic Resonance Imaging-guided Brachytherapy Re-irradiation for Isolated Local Recurrence of Soft Tissue Sarcoma”. Cureus. 2018 Apr 10;10(4)
- Dose-Volume Parameters and the Development of Late Bladder and Rectal Toxicity after MRI-Guided Brachytherapy for Locally Advanced Cervix Cancer. Accepted for publication in Brachytherapy Journal(2017) with Kathy Han et al





Program of

The 8th International Clinical Oncology Congress

The 18th Iranian Annual Clinical Oncology Congress

Clinical Oncology Program

Day 1: Wednesday 24 Jan. 2024 - Main (International) Hall

The Eighth
International
Clinical
Oncology
Congress

Main
Hall

Day 1

Wednesday
Jan 24
2024

| Time | Topic |
|--|--|
| Chairpersons: <ul style="list-style-type: none"> • Dr. Mohammadreza Ghavam Nasiri (Radio-oncologist) • Dr. Abdollah Fazlalizade (Radio-oncologist) • Dr. Alireza Nikofar (Radio-oncologist) • Dr. Gholamhossein Noferesti (Radio-oncologist) • Dr. Hossein Madani (Radio-oncologist) | |
| 08:15 - 08:30 | General Topics in Oncology 7th R of radiobiology <ul style="list-style-type: none"> • Dr. Farzad Taghizadeh Hesari (Radio-oncologist) |
| 08:35 - 09:45 | Panel: Ethics in oncology Moderator: <ul style="list-style-type: none"> • Dr. Farhad Samiei (Radio-oncologist) Members: <ul style="list-style-type: none"> • Dr. Khosro Mojir Sheybani (Radio-oncologist) • Dr. Poriya Adeli (Radio-oncologist) • Dr. Mohammadreza Kheradmand (Deputy police officer of the medical system organization) • Dr. Fazel Elahi (Hemato-oncologist) • Dr. Ali Kazemian (Radio-oncologist) |
| 09:50 - 10:20 | Opening ceremony |
| 10:20 - 10:55 | Break |
| 11:00 - 13:00 | Stereotactic radiotherapy ESTRO joint Session Moderators: <ul style="list-style-type: none"> • Dr. Farshid Arbabi (Radio-oncologist) • Dr. Farnaz Amozegar Hashemi (Radio-oncologist) |
| 11:00 - 11:45 | SBRT in bulky tumors and its combination with immunotherapy <ul style="list-style-type: none"> • Dr. Pedro Lara (Radiation oncologist) |
| 11:45 - 12:00 | Q&A |
| 12:00 - 12:45 | Step by step practice of spine SBRT <ul style="list-style-type: none"> • Dr. Filippo Alongi (Radiation oncologist) |
| 12:45 - 13:00 | Q&A |
| | Chairpersons: <ul style="list-style-type: none"> • Dr. Kazem Anvari (Radio-oncologist) • Dr. Mohammad Hoshyari (Radio-oncologist) |
| 13:05 - 13:25 | Gamma Knife SRS in Primary & Secondary Brain Tumors: a single institute experience <ul style="list-style-type: none"> • Dr. Ehsan Sarayi (Radio-oncologist) |

| Time | Topic | |
|---------------|--|--|
| 13:30 - 14:30 | Lunch & Prayer | |
| 14:30 - 15:10 | Gastrointestinal tract cancers | Debate: Definitive CRT vs. Neo-Adjuvant CRT in Adenocarcinoma of GEJ & Cardia Moderator: <ul style="list-style-type: none"> Dr. Mohammad Babayi (Radio-oncologist) Members: <ul style="list-style-type: none"> Dr. Nima Mousavi (Radio-oncologist) Dr. Reza Ghaletaki (Radio-oncologist) |
| 15:15 - 16:30 | | Panel: Multidisciplinary Management of Rectal Cancer Moderator: <ul style="list-style-type: none"> Dr. Sasan Razmjoo (Radio-oncologist) Members: <ul style="list-style-type: none"> Dr. Hojatollah Shahbazian (Radio-oncologist) Dr. Pari Ghadamgahi (Radio-oncologist) Dr. Reza Malayeri (Hemato-oncologist) Dr. Abdulhosein Talayizade (Oncosurgeon) Dr. Faramarz Beheshtifar (Oncosurgeon) Dr. Fayezeheh Salahshour (Radiologist) Dr. Armin Shahriyari (Gastroenterologist) |
| 16:30 - 18:30 | Workshop (Hegmataneh Hall) | Workshop: Radiotherapy plan evaluation Moderators: <ul style="list-style-type: none"> Dr. Ali Taghizadeh (Radio-oncologist) Dr. Amir Anvari (Radio-oncologist) Members: <ul style="list-style-type: none"> Dr. Kazem Anvari (Radio-oncologist) Dr. Ali Yaghoubi Joybari (Radio-oncologist) Dr. Mona Malekzadeh (Radio-oncologist) Dr. Sara Farahani (Radio-oncologist) Dr. Zahra Naderi (Radio-oncologist) Dr. Pegah Sasanpour (Radio-oncologist) Dr. Masoume Najafi (Radio-oncologist) |

The Eighth
International
Clinical
Oncology
Congress

Main
Hall

Day 1

Wednesday
Jan 24
2024

Day 2: Thursday 25 Jan. 2024 - Main (International) Hall

| Time | Topic | |
|--|------------------------------|--|
| Chairpersons: <ul style="list-style-type: none"> • Dr. Alireza Amou Heydari (Radio-oncologist) • Dr. Hadi Molana (Radio-oncologist) | | |
| 08:15 - 08:50 | Genitourinary system cancers | SBRT of Prostate Cancer <ul style="list-style-type: none"> • Dr. Cem Onal (Radiation oncologist) |
| 08:50 - 09:00 | | Q&A |
| 09:05 - 10:20 | | Panel: multidisciplinary management of oligometastatic prostate cancer Moderator: <ul style="list-style-type: none"> • Dr. Farshid Farhan (Radio-oncologist) Members: <ul style="list-style-type: none"> • Dr. Bahram Mofid (Radio-oncologist) • Dr. Erfan Amini (Uro-oncologist) • Dr. Saeed Farzaneh (Nuclear Medicine Specialist) • Dr. Arefeh Saeedian (Radio-oncologist) • Dr. Mohsen Sarkarian (Uro-oncologist) |
| 10:20 - 10:55 | Break | |
| 11:00 - 12:10 | Breast cancer | ESMO joint Session Moderators: <ul style="list-style-type: none"> • Dr. Pedram Fadavi (Radio-oncologist) • Dr. Mastaneh Sanei (Radio-oncologist) |
| 11:00 - 11:30 | | Antibody drug conjugate's role in breast cancer <ul style="list-style-type: none"> • Dr. Giuseppe Curigliano (Medical Oncologist) |
| 11:30 - 11:35 | | Q&A |
| 11:35 - 12:05 | | Updates in the treatment of HER2 positive breast cancers <ul style="list-style-type: none"> • Dr. Rupert Bartsch (Medical Oncologist) |
| 12:05 - 12:10 | | Q&A |
| 12:15 - 13:30 | | Panel: multidisciplinary management of HR and HER2 positive breast cancers Moderator: <ul style="list-style-type: none"> • Dr. Roham Salek (Radio-oncologist) Members: <ul style="list-style-type: none"> • Dr. Fatemeh Homayi (Radio-oncologist) • Dr. Sareh Hosseini (Radio-oncologist) • Dr. Hamidreza Mirzaei (Radio-oncologist) • Dr. Abulghasem Allahyari (Hemato-oncologist) • Dr. Horie Soleymani Bami (Radiologist) |

The Eighth
International
Clinical
Oncology
Congress

Main
Hall

Day 2

Thursday
Jan 25
2024

| Time | Topic | |
|---------------|------------------------------|---|
| 13:30 - 14:30 | Lunch & Prayer | |
| | Head and neck cancers | Chairpersons: <ul style="list-style-type: none"> • Dr. Payam Izadpanahi (Radio-oncologist) • Dr. Morteza Tabatabaeifar (Radio-oncologist) • Dr. Ugur Selek (President of Turkish society of radiation oncology) |
| 14:30 - 14:55 | | Reirradiation in head and neck cancers <ul style="list-style-type: none"> • Dr. Mustafa Cengiz (Radiation oncologist) |
| 14:55 - 15:00 | | Q&A |
| 15:00 - 16:15 | | Panel: multidisciplinary management of recurrent oral tongue SCC <p>Moderator:</p> <ul style="list-style-type: none"> • Dr. Ahmad Ameri (Radio-oncologist) <p>Members:</p> <ul style="list-style-type: none"> • Dr. Hasan Hamed (Radio-oncologist) • Dr. Ali Emadi Torghabe (Radio-oncologist) • Dr. Hashem Sharifian (Radiologist) • Dr. Mazyar Motiei (Otolaryngologist) • Dr. Ebrahim Karimi (Otolaryngologist) |
| 16:30 - 18:30 | Workshop (Main Hall) | ESTRO H&N Contouring Workshop <p>Moderators:</p> <ul style="list-style-type: none"> • Dr. Mehdi Aghili (Radio-oncologist) • Dr. Samira Azghandi (Radio-oncologist) <p>ESTRO experts:</p> <ul style="list-style-type: none"> • Dr. Jesper Eriksen (Clinical oncologist) • Dr. Vincent Gregoire (Radiation Oncologist) |
| 18:30 - 20:00 | ISCO annual general assembly | |

The Eighth
International
Clinical
Oncology
Congress

Main
Hall

Day 2

Thursday
Jan 25
2024

Day 3: Friday 26 Jan. 2024 - Main (International) Hall

| Time | Topic | |
|---------------|----------------------------|--|
| | | Chairpersons: <ul style="list-style-type: none"> • Dr. Alireza Naseri (Radio-oncologist) • Dr. Reza Khodabakhshi (Radio-oncologist) |
| 08:15 - 08:35 | Gynecologic cancers | MRI based brachytherapy of Gynecologic cancers <ul style="list-style-type: none"> • Dr. Ali Bagheri (Radio-oncologist) |
| 08:40 - 09:55 | | Panel: multidisciplinary management of recurrent cervical cancer <p>Moderator:</p> <ul style="list-style-type: none"> • Dr. Ahmad Mosallayi (Radio-oncologist) <p>Members:</p> <ul style="list-style-type: none"> • Dr. Mansour Ansari (Radio-oncologist) • Dr. Mojgan Akbarzadeh Jahromi (Pathologist) • Dr. Samaneh Bahrami (Gynecologic oncologist) • Dr. Nezhat Khanjani (Radio-oncologist) • Dr. Zahra Shirvani (Gynecologic oncologist) |
| 10:00 - 10:30 | Break | |
| | General topics in oncology | <p>Moderators:</p> <ul style="list-style-type: none"> • Dr. Ahmad Mafi (Radio-oncologist) • Dr. Ali Motlagh (Radio-oncologist) |
| 10:30 - 10:55 | | Particle Therapy: Experience from Austria <ul style="list-style-type: none"> • Dr. Piero Fossati (Radiation Oncologist) |
| 10:55 - 11:00 | | Q&A |
| 11:05 - 11:30 | | Particle Therapy: Experience from India <ul style="list-style-type: none"> • Dr. Rakesh Jalali (Radiation Oncologist) |
| 11:30 - 11:35 | | Q&A |
| | | Chairpersons: <ul style="list-style-type: none"> • Dr. Mina Tajvidi (Radio-oncologist) • Dr. Simin Hemati (Radio-oncologist) • Dr. Shole Arvandi (Radio-oncologist) |
| 11:40 - 12:05 | | General Considerations and Challenges in Pediatric Radiotherapy <ul style="list-style-type: none"> • Dr. Mitra Ghalibafian (Radio-oncologist) |

| Time | Topic | |
|---------------|----------------------------|---|
| | General topics in oncology | Chairpersons: <ul style="list-style-type: none"> • Dr. Amirmohammad Arefpour (Radio-oncologist) • Dr. Hossein Foudazi (Radio-oncologist) • Dr. Seyed Amir Ale Davood (Radio-oncologist) |
| 12:10 - 12:50 | | Individualized Radiotherapy in 2024: Current Status and Future Perspective <ul style="list-style-type: none"> • Dr. Matthias Guckenberger (Radiation Oncologist) |
| 12:50 - 13:00 | | Q&A |
| 13:00 - 13:30 | Closing ceremony | |
| 13:30 - 14:30 | Lunch & Prayer | |

The Eighth
International
Clinical
Oncology
Congress

Main
Hall

Day 3

Friday
Jan 26
2024

Oncology Nursing Program

Day 1: Wednesday 24 Jan. 2024 - Tooska Hall

The Eighth
International
Clinical
Oncology
Congress

Tooska
Hall

Day 1

Wednesday
Jan 24
2024

| Time | Topic |
|---------------|---|
| 08:15 - 08:30 | Opening ceremony |
| 08:30 - 08:40 | Introduction to the objectives of the congress in the nursing sector <ul style="list-style-type: none"> Dr. Salman Barasteh (Assistant Prof of Nursing) |
| 08:40 - 08:45 | Introducing congress panels <ul style="list-style-type: none"> Dr. Maryam Karami (PhD in nursing) |
| 08:45 - 10:00 | Panel: Chemotherapy nursing care <p>Moderator:</p> <ul style="list-style-type: none"> Dr. Maryam Katanbaf (Medical Doctor) <p>Members:</p> <ul style="list-style-type: none"> Alireza Farid Khomami (Chemotherapy instructor) Esmail Rezayi (Chemotherapy instructor) Dr. Maryam Karami (PhD in nursing) |
| 10:00 - 10:30 | Presentation of accepted articles <ul style="list-style-type: none"> Mobina Gol Mohammadi (MSc in nursing) Dr. Elahe Ramezanzadeh Tabriz (Assistant Prof of Nursing) Dr. Pooneh Pirjani (Medical Doctor) |
| 10:30 - 11:00 | Break |
| 11:00 - 13:00 | Panel: management of Lymphedema in cancer patients <p>Moderator:</p> <ul style="list-style-type: none"> Leyla Angouti (MSc of occupational Therapy) <p>Member:</p> <ul style="list-style-type: none"> Dr. Pooneh Pirjani (Medical Doctor) |
| 13:00 - 14:00 | Lunch & Prayer |
| 14:00 - 15:30 | Panel: Palliative Care <p>Moderator:</p> <ul style="list-style-type: none"> Dr. Maryam Rasouli (Prof of nursing) <p>Members:</p> <ul style="list-style-type: none"> Dr. Leyla Khanali Mojen (Assistant Prof of Nursing) Dr. Azam Shirin Abadi Farahani (Associate Prof of Nursing) Dr. Samira Beiranvand (Assistant Prof of Nursing) Dr. Hadis Ashrafizadeh (Assistant Prof of Nursing) Dr. Salman Barasteh (Assistant Prof of Nursing) Dr. Azam Eshaghian (PhD in nursing) |
| 15:30 - 16:00 | Presentation of accepted articles <ul style="list-style-type: none"> Dr. Zahra Ebadinejad (Assistant Prof of Nursing) Dr. Hossein Jabbari Beirami (Prof of health services management) |

Day 2: Thursday 25 Jan. 2024 - Tooska Hall

| Time | Topic |
|---------------|---|
| 08:15 - 08:30 | A report on the previous day's topics and the upcoming plans <ul style="list-style-type: none"> Dr. Maryam Karami (PhD in nursing) |
| 08:30 - 10:00 | Panel: Radiotherapy induced ulcers <p>Moderator:</p> <ul style="list-style-type: none"> Mehdi Akbarzadeh Amirdehi (MSc in nursing) <p>Members:</p> <ul style="list-style-type: none"> Saeed Paseban Noghabi (MSc in nursing) Alireza Abbasi Niasar (BSc in nursing) Seyed Amir Hossein Taghavi Sangdehi (BSc in nursing) |
| 10:00 - 10:30 | Presentation of accepted articles <ul style="list-style-type: none"> Hamed Savadkoobi (MSc in nursing) Mahvash Agahi (BSc in nursing) |
| 10:30 - 11:00 | Break |
| 11:00 - 13:00 | Panel: Pain in cancer patients <p>Moderator:</p> <ul style="list-style-type: none"> Dr. Ladan Sedighi (Assistant Prof of Nursing) <p>Members:</p> <ul style="list-style-type: none"> Dr. Neda Sanayi (Assistant Prof of Nursing) Dr. Fatemeh Bahram Nejad (Associate prof of nursing) Dr. Seyed Ghasem Mousavi (Assistant Prof of Nursing) |
| 13:00 - 14:00 | Lunch & Prayer |
| 14:00 - 15:30 | Panel: Nursing Care in radiotherapy <p>Moderator:</p> <ul style="list-style-type: none"> Dr. Maryam Karami (PhD in nursing) <p>Members:</p> <ul style="list-style-type: none"> Fatemeh Khademi (MSc in nursing) Amin Noori (MSc in nursing) |
| 15:30 - 16:00 | Presentation of accepted articles <ul style="list-style-type: none"> Dr. Maryam Elahikhah (Medical Doctor) Dr. Parand Pour Azar Hagh (Medical Doctor) |

The Eighth
International
Clinical
Oncology
Congress

Tooska
Hall

Day 2

Thursday
Jan 25
2024

Clinical Radiobiology Program

Day 1: Wednesday 24 Jan. 2024 - Molavi Hall

| Time | Topic |
|---------------|--|
| | Moderators: <ul style="list-style-type: none"> Dr. Seyed Rabi Mahdavi (Associate Prof of Medical Physics) Dr. Bijan Hashemi Malayeri (Medical Physics) |
| 08:30 - 08:45 | Holly Quran recitation and welcoming |
| 08:45 - 09:15 | Introductory talk <ul style="list-style-type: none"> Dr. Hossein Mozdarani (Prof of Medical Physics) |
| 09:15 - 09:45 | Radiobiology of Radiotherapy-NSD to BED <ul style="list-style-type: none"> Prof. Arun Chougul (Prof of Medical Physics) |
| 09:50 - 10:20 | Opening ceremony |
| 10:20 - 10:55 | Break |
| | Axis: Precision Radiotherapy |
| | Moderators: <ul style="list-style-type: none"> Dr. Hossein Mozdarani (Prof of Medical Physics) Dr. Mohammad Amin Mosleh Shirazi (Associate Prof of Medical Physics) Dr. Ali Motlagh (Radio-oncologist) Dr. Farhad Samiei (Radio-oncologist) |
| 11:00 - 11:30 | Radiomics and radiogenomics with AI for oncology <ul style="list-style-type: none"> Dr. Hidetaka Arimura (Prof of Medical Physics) |
| 11:30 - 12:00 | Biologically targeted radiotherapy <ul style="list-style-type: none"> Prof. Annette Haworth (Prof of Medical Physics) |
| 12:00 - 12:30 | Simultaneous delivery of LDR and hyperthermia <ul style="list-style-type: none"> Prof. Ishmael Parsai (Prof of Medical Physics) |
| 12:30 - 13:00 | Interventional radiotherapy(Brachytherapy):A suitable solution for reirradiation of recurrent tumors close to sensitive organs exposed to the line <ul style="list-style-type: none"> Dr. Ramin Jaberi (PhD of Medical Physics) |
| 13:00 - 13:30 | Radiobiology of brachytherapy <ul style="list-style-type: none"> Dr. Mary Joan (Associate Prof of Medical Physics) |
| 13:30 - 14:30 | Lunch & Prayer |

The Eighth
International
Clinical
Oncology
Congress

Molavi
Hall

Day 1

Wednesday
Jan 24
2024

Day 2: Thursday 25 Jan. 2024 - Molavi Hall

| Time | Topic |
|---------------|---|
| | Axis: General Radiobiology Chairpersons: <ul style="list-style-type: none"> • Dr. Ali Shabestani Monfared (Prof of Medical Physics) • Dr. Reza Sadeghi (Medical Physics) • Dr. Mohsen Bakhshandeh (Prof of Medical Physics) • Dr. Fatemeh Pakniyat (Assistant Prof of Medical Physic) |
| 08:30 - 08:50 | Radiobiological concepts of streotactic radiotherapy. Poly and oligometastatic disease <ul style="list-style-type: none"> • Dr. Sara Samiei (Radiooncologist) |
| 08:50 - 09:10 | High and low dose spots in treatment planning in radiotherapy. How do they affect on the outcome? <ul style="list-style-type: none"> • Dr. Ali Shabestani Monfared (Prof of Medical Physics) |
| 09:10 - 09:30 | The current status of the BNCT method in the treatment of malignancies and its challenges in Iran <ul style="list-style-type: none"> • Dr. Seyed Abolghasem Haeri (Assistant Prof of Medical Physic) |
| 09:30 - 09:50 | AI and radiobiological modeling <ul style="list-style-type: none"> • Dr. Hamid Abdollahi (online) |
| 09:50 - 10:20 | Radiation induced secondary cancers <ul style="list-style-type: none"> • Dr. Mohammad Mohammadi (Prof of Medical Physics) (online) |
| 10:20 - 10:55 | Break |
| | Axis: Radioprotectors/radiosetisizers Chairpersons: <ul style="list-style-type: none"> • Dr. Samideh Khoei (Prof of Medical Physics) • Dr. Asghar Maziar (Assistant Prof of Medical Physic) • Dr. Abulhasan Rezaeian (Assistant Prof of Medical Physic) • Dr. Mohammad Akbarnejad (PhD of Medical Physics) |
| 11:00 - 11:20 | Application of nano-sized radiosensitizers in cancer treatment. <ul style="list-style-type: none"> • Dr. Samideh Khoei (Prof of Medical Physics) |
| 11:20 - 11:35 | Mirafos: a novel dual acting radiosensitizer/radio protector drug <ul style="list-style-type: none"> • Dr. Hossein Mozdarani (Prof of Medical Physics) |
| 11:35 - 11:50 | Investigating radiosensitivity of graphen quantum dots nanoparticles <ul style="list-style-type: none"> • Dr. Fereshteh Kosha (Assistant Prof of Medical Physic) |
| 11:50 - 12:05 | Tranostic RDG@Fe3o4-Au/Gd NPs in MR imaging and targeted radiotherapy of breast cancer cells in vitro <ul style="list-style-type: none"> • Dr. Azadeh Emraei (Assistant Prof of Medical Physic) |
| 12:05 - 12:20 | Normal tissue complication models in radiobiology <ul style="list-style-type: none"> • Dr. Sousan Cheraghi (Assistant Prof of Medical Physic) |
| 12:20 - 12:35 | Enhanced in vitro radiation therapy of cancer cells by magnetite core and Cus shell nanoparticles <ul style="list-style-type: none"> • Dr. Soraya Minaei (Assistant Prof of Medical Physic) |
| 12:35 - 12:50 | Reexamining of potential mechanisms of radiation-induced cell death and their relevance with non-target effects in radiotherapy <ul style="list-style-type: none"> • Dr. Fatemeh Pakniyat (Assistant Prof of Medical Physic) |
| 12:50 - 13:05 | Cerebral radiobiology and neuroimaging of brain tumors <ul style="list-style-type: none"> • Dr. Abulhasan Rezaeian (Assistant Prof of Medical Physic) |
| 13:05 - 13:20 | Inherent radiosensitivity: A crucial advance toward personalized radiation therapy <ul style="list-style-type: none"> • Dr. Hossein Azimian (Assistant Prof of Medical Physic) |
| 13:30 - 14:30 | Lunch & Prayer |

The Eighth
International
Clinical
Oncology
Congress

Molavi
Hall

Day 2

Thursday
Jan 25
2024



Day 3: Friday 26 Jan. 2024 - Molavi Hall

| Time | Topic |
|---------------|---|
| 08:30 - 10:00 | Panel Discussion Radiobiology and precision radiotherapy |
| 10:00 - 10:30 | Break |
| 10:30 - 11:00 | 20 years publication of International Journal of Radiation Research • Dr. Hossein Mozdarani (Prof of Medical Physics) |
| 11:00 - 13:00 | Panel discussion: Future of Radiobiology in Iran |
| 13:00 - 13:30 | Closing ceremony |
| 13:30 - 14:30 | Lunch & Prayer |

The Eighth
International
Clinical
Oncology
Congress

Molavi
Hall

Day 3

Friday
Jan 26
2024

Day 1: Wednesday 24 Jan. 2024 - Hegmataneh Hall

| Time | Topic |
|---------------|--|
| 08:30 - 08:45 | Holly Quran recitation and welcoming |
| 08:45 - 10:30 | Axis: Treatment Planning and Modeling I Moderator: <ul style="list-style-type: none"> Dr. Mohammad Amin Mosleh Shirazi (Associate Prof of Medical Physics) Members: <ul style="list-style-type: none"> Dr. Ghazale Geraily (Prof of Medical Physics) Dr. Mohsen Bakhshandeh (Associate Prof of Medical Physics) Dr. Mohammad Javad Tahmasabi Birgani (Prof of Medical Physics) |
| 08:45 - 09:10 | Medical physicists' role in the new era of radiotherapy in Iran <ul style="list-style-type: none"> Dr. Mohammad Amin Mosleh Shirazi (Associate Prof of Medical Physics) |
| 09:10 - 09:35 | Fractionated Gamma knife radiosurgery <ul style="list-style-type: none"> Dr. Ghazale Gerayeli (Prof of Medical Physics) |
| 09:35 - 10:05 | On-Line adaptive Radiotherapy, Sharing of two years' experiences of NCCCR <ul style="list-style-type: none"> Dr. Aram Rostami (Phd of Medical Physics) |
| 10:05 - 10:30 | Motion Management system in Radiotherapy <ul style="list-style-type: none"> Dr. Mohsen Bakhshandeh (Associate Prof of Medical Physics) |
| 10:30 - 11:00 | Break |
| 11:00 - 13:30 | Axis: Treatment Planning and Modeling II Moderator: <ul style="list-style-type: none"> Dr. Seyed Rabi Mahdavi (Associate Prof of Medical Physics) Members: <ul style="list-style-type: none"> Dr. Ali Shabestani Monfared (Prof of Medical Physics) Dr. Hassan Ali Nedaie (Prof of Medical Physics) Dr. Nahid Chegeni (Associate Prof of Medical Physics) |
| 11:00 - 11:30 | Preference of Gamma knife for brain benign Tumors compared to IMRT and VMAT. Radiobiology Prospective <ul style="list-style-type: none"> Dr. Hasan Ali Nedaie (Prof of Medical Physics) |
| 11:30 - 12:00 | Interaoperative Radiotherapy: Past, Present, Future <ul style="list-style-type: none"> Dr. Ali Shabestani Monfared (Prof of Medical Physics) |
| 12:00 - 12:30 | Radiomics role in radiation therapy <ul style="list-style-type: none"> Dr. Seyed Rabi Mahdavi (Associate Prof of Medical Physics) |
| 12:30 - 13:00 | Neutron Contamination Concerns in Grid Radiation Therapy <ul style="list-style-type: none"> Dr. Nahid Chegeni (Associate Prof of Medical Physics) |

**The Eighth
International
Clinical
Oncology
Congress**

Hegmataneh
Hall

Day 1

Wednesday
Jan 24
2024

| Time | Topic |
|---------------|--|
| 13:00 - 13:15 | Dosimetric impact of collimator rotation on VMAT and IMRT for rectal cancer patients <ul style="list-style-type: none"> Dr. Amin Banaei (Assistant Prof of Medical Physics) |
| 13:15 - 13:30 | Beam quality and the mystery behind the lower percentage depth dose in grid therapy <ul style="list-style-type: none"> Mr. Amir Hossein Karimi (Phd student in Medical Physics) |
| 13:30 - 14:30 | Lunch & Prayer |
| 14:30 - 16:30 | Axis: Brachytherapy <p>Moderator:</p> <ul style="list-style-type: none"> Dr. Ramin Jaber (PhD of Medical Physics) <p>Members:</p> <ul style="list-style-type: none"> Dr. Mehdi Ghorbani Dr. Fatemeh Mohammadian Mrs. Behjat Haghighian Mr. Javad Ghasemi |
| 14:30 - 15:00 | Organ Function preservation in Head and Neck Brachytherapy <ul style="list-style-type: none"> Dr. Ramin Jaber (PhD of Medical Physics) |
| 15:00 - 15:15 | Comparison of Computed Tomography and Magnetic Resonance Imaging in cervical cancer brachytherapy with dosimetric and clinical parameters <ul style="list-style-type: none"> Dr. Fatemeh Mohammadian(Radio-oncologist) |
| 15:15 - 16:00 | The Risks of Unsupervised Use of Contrast medium in Cancer Patients <ul style="list-style-type: none"> Dr. Ramin Jaber (PhD of Medical Physics) |
| 16:00 - 16:30 | Eye Plaque Brachytherapy in Princess Margaret Cancer Center <ul style="list-style-type: none"> Dr. Beiki-Ardakani (Phd of Medical Physics) (online) |

Day 2: Thursday 25 Jan. 2024 - Hegmataneh Hall

| Time | Topic |
|---------------|--|
| 08:30 - 10:30 | Axis: Advance Treatment Techniques Moderator: <ul style="list-style-type: none"> Dr. Aram Rostami (Phd of Medical Physics) Members: <ul style="list-style-type: none"> Dr. Ali Jomezadeh (Associate Prof of Medical Physics) Dr. Alireza Farajolahi (Prof of Medical Physics) Dr. Mohsen Saeb (Phd of Medical Physics) |
| 08:30 - 09:00 | Importance of neutron contamination in Radiotherapy: Yes or No <ul style="list-style-type: none"> Dr. Hector Rene Vega-Carillo (Phd of Medical Physics) (online) |
| 09:00 - 09:30 | Electron Flash Radiotherapy <ul style="list-style-type: none"> Dr. Giuseppe Felici (Phd of Medical Physics) (online) |
| 09:30 - 10:00 | Photon and Proton spatially GRID radiation therapy <ul style="list-style-type: none"> Dr. Majid Mohiuddin (Radio-oncoogist) (online) |
| 10:00 - 10:30 | Proton therapy- physics challenges and solutions <ul style="list-style-type: none"> Mr. Abdul Sattar Khalid (Msc of Medical Physics) (online) |
| 10:30 - 11:00 | Break |
| 11:00 - 13:00 | Axis: Dosimetry & QA Moderator: <ul style="list-style-type: none"> Dr. Abolfazl NikFarjam (Associate Prof of Medical Physics) Members: <ul style="list-style-type: none"> Dr. Hamid Gholamhosseinian (Assistant Prof of Medical Physics) Dr. Fateme Saif (Associate Prof of Medical Physics) Dr. Mahmoud Reza Akbari (Phd of Medical Radiation) Dr. Hadi Keivan (Assistant Prof of Medical Physics) |
| 11:00 - 11:30 | EPID Dosimetry in Radiation therapy: From TG-58 (2001) to TG-307 (2023) <ul style="list-style-type: none"> Dr. Ali Jomezadeh (Associate Prof of Medical Physics) |
| 11:30 - 12:00 | Image based QA procedures for IMRT and VMAT <ul style="list-style-type: none"> Dr. Mohammad Mohammadi (Phd of Medical Physics) (online) |
| 12:00 - 12:30 | Total body Irradiation Dosimetry <ul style="list-style-type: none"> Dr. Mohammad Mohammadi (Phd of Medical Physics) (online) |
| 12:30 - 13:00 | Clinical consequences of improper performance of modern Linac parts <ul style="list-style-type: none"> Mr. Mohammad Mehdikhani (Medical Radiation Engineering) |
| 13:00 - 13:15 | Hippocampus Sparing in Whole Brain Radiotherapy: Dosimetric Study Between 3D-conformal, IMRT and VMAT <ul style="list-style-type: none"> Dr. Fatemeh Seif (Associate Prof of Medical Physics) |

The Eighth
International
Clinical
Oncology
Congress

Hegmataneh
Hall

Day 2

Thursday
Jan 25
2024



| Time | Topic |
|---------------|---|
| 13:15 - 13:30 | Exploring the Beam Modeling Algorithm in Patient-Specific IMRT Quality Assurance <ul style="list-style-type: none"> Dr. Hadi Keivan (Assistant Prof of Medical Physics) |
| 13:30 - 14:30 | Lunch & Prayer |
| 14:30 - 16:30 | Axis: Imaging in Radiotherapy <p>Moderator:</p> <ul style="list-style-type: none"> Dr. Mohammad Reza Bayatiani (Associate Prof of Medical Physics) <p>Members:</p> <ul style="list-style-type: none"> Dr. Ali Divband (Nuclear Medicine Specialist) Dr. Davood Khezerloo (Associate Prof of Medical Physics) Dr. Seyed Masoud Rezaeijo (Assistant Prof of Medical Physics) |
| 14:30 - 14:45 | Evaluation of IMRT plan robustness in patients with localized prostate cancer using different setup uncertainty scenarios <ul style="list-style-type: none"> Dr. Abolfazl Kanani (Phd of Medical Physics) |
| 14:45 - 15:00 | Dosimetric comparison of 3D Conformal Radiotherapy, IMRT and Tomotherapy plans in Nasopharyngeal Cancer <ul style="list-style-type: none"> Mr. Rasoul Sogandi (Msc of Medical Physics) |
| 15:00 - 15:30 | Dosimetry in Radiopharmaceutical Therapy <ul style="list-style-type: none"> Dr. Ali Divband (Nuclear Medicine Specialist) |
| 15:30 - 15:45 | Accurate prediction: deep learning approach for dose prediction integrating field shape and patient anatomy in breast cancer patients radiation therapy <ul style="list-style-type: none"> Dr. Mohammad Ehsan Ravari (Assistant Prof of Medical Physics) |
| 15:45 - 16:00 | Patient-specific geometrical distortion corrections of MRI images improve dosimetric planning accuracy of vestibular schwannoma treated with gamma knife stereotactic radiosurgery <ul style="list-style-type: none"> Mr. Younes Afkham (Msc of Medical Physic) |
| 16:00 - 16:15 | Assessment of radiation therapy dose distribution using digitally reconstructed Radiograph <ul style="list-style-type: none"> Mr. MohammadYasin Mohammadi (Phd student of Medical Physics) |
| 16:15 - 16:30 | Evaluation of relationship between the complexity of Intensity Modulated Radiation Therapy of head and neck plans and results of Quality Assurance with the help of phantom measurements and determination of complexity threshold values <ul style="list-style-type: none"> Mrs. Fatemeh Nosrati (Msc of Medical Physic) |

Day 1: Wednesday 24 Jan. 2024

| Time | Topic |
|---------------|--|
| 14:00 - 15:30 | Plan Evaluation Parameters in SRS & SBRT <ul style="list-style-type: none"> Dr. Mohsen Bakhshandeh (Associate Prof of Medical Physics) |
| 15:30 - 17:00 | Breast Interstitial Brachytherapy <ul style="list-style-type: none"> Dr. Ali Bagheri (Radio-Oncologist) |

Day 2: Thursday 25 Jan. 2024

| Time | Topic |
|---------------|---|
| 14:00 - 17:00 | Advanced Linear Accelerator-Based Radiotherapy Treatment Planning <ul style="list-style-type: none"> Dr. Mohsen Bakhshandeh (Associate Prof of Medical Physics) |

Day 3: Friday 26 Jan. 2024

| Time | Topic |
|---------------|---|
| 08:30 - 10:30 | Photon Beam Commissioning <ul style="list-style-type: none"> Dr. Aram Rostami (Phd of Medical Physics) Mr. Mohammad Mehdikhani (Medical Radiation Engineering) |
| 10:30 - 11:00 | Break |
| 11:00 - 13:30 | Photon Beam Commissioning (continued) <ul style="list-style-type: none"> Dr. Aram Rostami (Phd of Medical Physics) Mr. Mohammad Mehdikhani (Medical Radiation Engineering) |
| 13:30 - 14:30 | Lunch & Prayer |

The Eighth
International
Clinical
Oncology
Congress



Day 1

Wednesday
Jan 24
2024

Day 2

Thursday
Jan 25
2024

Day 3

Friday
Jan 26
2024

Radiation Technologist's Program

Day 1: Wednesday 24 Jan, 2024 - Razi Hall

| Time | Topic |
|---------------|--|
| | Chairpersons: <ul style="list-style-type: none"> Mohsen Masoumi (Radiotherapy technologist) Nader Sepanlou (Radiotherapy technologist and Masters in medical radiation engineering) Dr. Foad Goli Ahmadabad (PhD student in medical physics) |
| 09:00 - 09:15 | Opening Speech <ul style="list-style-type: none"> Nader Sepanlou (Radiotherapy technologist and Masters in medical radiation engineering) |
| 09:15 - 09:45 | Prostate cancer IGRT by tomotherapy accelerators <ul style="list-style-type: none"> Dr. Foad Goli Ahmadabad (student of PhD in medical physics) |
| 09:45 - 10:30 | Ethics <ul style="list-style-type: none"> Ali Asgarian (Radiology technologist) |
| 10:30 - 11:30 | Break |
| | Chairpersons: <ul style="list-style-type: none"> Amir Hooshang Sedigh (Radiotherapy technologist and Masters in medical physics) Asma Khodadadi (Radiotherapy technologist and Masters in medical physics) Dr. Maryam Yaftian (PhD student in medical radiation) |
| 11:30 - 12:00 | Radiobiology aspect of Re-irradiation <ul style="list-style-type: none"> Hadis Momeni (Radiotherapy technologist and Masters in radiobiology) |
| 12:00 - 12:30 | Role of expert radiation technologist in Gamma knife with CBCT <ul style="list-style-type: none"> Asma Khodadadi (Radiotherapy technologist and Masters in medical physics) |
| 12:30 - 13:30 | Role of AI in segmentation and identification of organs and introduction to AI based linear accelerators <ul style="list-style-type: none"> Dr. Maryam Yaftian (PhD student in medical radiation) |
| 13:30 - 14:30 | Lunch & Prayer |
| | Chairpersons: <ul style="list-style-type: none"> Dr. Mahnaz Ilkhani (Doctorate in clinical practice) Nader Sepanlou (Radiotherapy technologist and Masters in medical radiation engineering) Dr. Somaye Joolani (PhD student in genetics) |
| 14:30 - 16:00 | Nursing care in radiotherapy and oncology <ul style="list-style-type: none"> Dr. Mahnaz Ilkhani (Doctorate in clinical practice) |

The Eighth
International
Clinical
Oncology
Congress

Razi
Hall

Day 1

Wednesday
Jan 24
2024

Day 2: Thursday 25 Jan, 2024 - Razi Hall

| Time | Topic |
|---------------|--|
| | Chairpersons: <ul style="list-style-type: none"> Amir Hooshang Sedigh (Radiotherapy technologist and Masters in medical physics) Mohsen Masoumi (Radiotherapy technologist) Dr. Somaye Joolani (PhD student in genetics) |
| 09:00 - 09:30 | The effect of diet and bladder volume changes on movement of prostate <ul style="list-style-type: none"> Vahid Shabani (PhD student in medical physics) |
| 09:30 - 10:00 | Role of expert and knowledgeable technologists in advanced treatments, according to treatment protocols <ul style="list-style-type: none"> Fatemeh Fahimi (Radiotherapy technologist and Masters in medical physics) |
| 10:00 - 10:30 | Genetics and bioinformatics <ul style="list-style-type: none"> Fatemeh Soleymanian (Radiotherapy technologist and Masters in genetics) |
| 10:30 - 11:30 | Break |
| | Chairpersons: <ul style="list-style-type: none"> Dr. Ahmad Reza Sebzari (Radio-oncologist) Dr. Mahdiyeh Dayyani (Radio- oncologist) Dr. Mitra Ghalibafian (Radio- oncologist) |
| 11:30 - 12:10 | Role of the radio-oncologist in the treatment process <ul style="list-style-type: none"> Dr. Ahmad Sebzari (Radio-oncologist) |
| 12:10 - 12:50 | Role of expert and knowledgeable technologists in advanced treatments, From the point of view of a radio-oncologist <ul style="list-style-type: none"> Dr. Mahdiyeh Dayyani (Radio-oncologist) |
| 12:50 - 13:30 | Radiotherapy department in the 21st century: an example of communication and interdisciplinary management to improve the quality of care <ul style="list-style-type: none"> Dr. Mitra Ghalibafian (Radio-oncologist) |
| 13:30 - 14:30 | Lunch & Prayer |
| | Chairpersons: <ul style="list-style-type: none"> Simin Abbasi (Radiotherapy technologist) Fatemeh Partoyi Rad (Radiotherapy technologist and Masters in medical radiation) Amirhoushang Seddigh (Radiotherapy technologist and Masters in medical physics) |
| 14:30 - 15:00 | Visiting a radiotherapy center in Adelaide, Australia from the point of view of a radiotherapy technologist <ul style="list-style-type: none"> Simin Abbasi (Radiotherapy technologist) |
| 15:00 - 15:30 | Application of Monte Carlo codes for the purpose of individual radiotherapy <ul style="list-style-type: none"> Fatemeh Partoy Rad (Radiotherapy technologist and Masters in medical radiation) |
| 15:30 - 16:00 | Optimization of treatment techniques: Breast, CSI, Testis, Brain <ul style="list-style-type: none"> Hanie Aslani (Radiotherapy technologist and Masters in medical physics) |

The Eighth
International
Clinical
Oncology
Congress

Razi
Hall

Day 2

Thursday
Jan 25
2024







Abstracts and Posters of

**The 8th
International Clinical
Oncology Congress**

The 18th Iranian Annual Clinical Oncology Congress



| poster number | Title | Author | Field | Monitor | day | time |
|---------------|---|----------------------------|--------------------|---------|--------|-------------|
| 1 | Comparison of received dose from three iodine radionuclides (I123, I125 and I131) in thyroid cell model using Gate Monte Carlo simulation | Sahar Ahmadian | Medical Physicists | 1 | Jan-24 | 14.00-14.10 |
| 2 | Deep-Learned Classification of Bone Lesions in Proximal Femur/Pelvis X-ray Radiographs | Elaheh Tarighati | Medical Physicists | 2 | Jan-24 | 14.00-14.10 |
| 3 | Comparison of dosimetry of left and right parotid for the treatment of nasopharyngeal cancer using two methods of helical tomotherapy and Three Dimensional Conformal Radiation Therapy | Zahra Pourparvar | Medical Physicists | 3 | Jan-24 | 14.00-14.10 |
| 4 | Iron oxide nanoparticles coated with polydopamine as a potential nano-photothermal agent for treatment of melanoma cancer | Fahimeh Hossein Beigi | Medical Physicists | 4 | Jan-24 | 14.00-14.10 |
| 5 | Investigating the Effects of Radiation Dose on Brain Tumor Treatment Efficacy using Monte Carlo Modeling | Mohsen Mehrabi | Medical Physicists | 5 | Jan-24 | 14.00-14.10 |
| 6 | Investigating the Effects of Radiation Dose on Brain Tumor Treatment Efficacy using Monte Carlo Modeling | Mohsen Mehrabi | Medical Physicists | 1 | Jan-24 | 14.10-14.20 |
| 7 | Enhancement of ¹⁶¹ Tb radionuclide production by irradiation of Nano Gd target | Nafise Salek | Medical Physicists | 2 | Jan-24 | 14.10-14.20 |
| 8 | Preparation and quality control of [^{113m} In]-In-PSMA: A novel SPECT agent for prostate cancer imaging | Leyla Akbari | Medical Physicists | 3 | Jan-24 | 14.10-14.20 |
| 9 | How applicator diameter can influence the radiobiological characteristics of low-energy IORT X-rays? | Hamid Reza Baghani | Medical Physicists | 4 | Jan-24 | 14.10-14.20 |
| 10 | Preparation of ⁸⁹ Zr-DFO-Cetuximab for imaging of EGFR-expressing tumors | Samaneh Zolghadri | Medical Physicists | 5 | Jan-24 | 14.10-14.20 |
| 11 | Development of ⁸⁹ Zr-DFO-Bevacizumab for PET imaging of VEGF+ tumors | Fatemeh Mohammadpour-Ghazi | Medical Physicists | 1 | Jan-24 | 14.20-14.30 |
| 12 | Design and development of ¹⁶⁶ Dy/ ¹⁶⁶ Ho generator to produce carrier-free ¹⁶⁶ Ho for use in nuclear medicine | Sara Vosoughi | Medical Physicists | 2 | Jan-24 | 14.20-14.30 |
| 13 | Enhancing Cancer Therapy Through Nanomaterial-Based Radiosensitizers in Combined Photothermal and Radiotherapy | Arash Safari | Medical Physicists | 3 | Jan-24 | 14.20-14.30 |
| 14 | A Survey on Quality of life Indicators During the Last Months of Terminally ill Cancer Patients in Iran; A Cross-Sectional Study in a Home-based Palliative Care Center | Kosar Hosseini | Medical Physicists | 4 | Jan-24 | 14.20-14.30 |

| poster number | Title | Author | Field | Monitor | day | time |
|---------------|--|------------------------|--------------------|---------|--------|----------------|
| 15 | Preparation of MnO ₂ @poly-(DMAEMA-co-IA)-conjugated methotrexate nano-complex for MRI and radiotherapy of breast cancer application | Saba Ziyae | Medical Physicists | 5 | Jan-24 | 14.20-14.30 |
| 16 | Exploring the Beam Modeling Algorithm in Patient-Specific IMRT Quality Assurance | Hadi keivan | Medical Physicists | 1 | Jan-25 | 10.20-10.30 AM |
| 17 | Changes in radiation dose distribution by a medical mask used during COVID-19 pandemic | Azan Janati Esfahani | Medical Physicists | 2 | Jan-25 | 10.20-10.30 AM |
| 18 | Advancements in Breast Cancer Risk Prediction Using Artificial Intelligence: A Systematic Review | Mostafa Jafari | Medical Physicists | 3 | Jan-25 | 10.20-10.30 AM |
| 19 | Stereotactic radiosurgery in brain metastasis; single or combined therapy? | Nima Rostampour | Medical Physicists | 4 | Jan-25 | 10.20-10.30 AM |
| 20 | Enhancing Precision Oncology for Advanced Uterine Cancer through Genomic Profiling and Biomarker-Directed Treatments | Mohamamdreza Elhaie | Medical Physicists | 5 | Jan-25 | 10.20-10.30 AM |
| 21 | Sensitivity Analysis of Field Width on quality and treatment time for brain hypo-fractional treatment | Farzaneh Hajalikhani | Medical Physicists | 1 | Jan-25 | 10.30-10.40 AM |
| 22 | Introducing a simple and cost effective phantom for fast and simple stereotactic radiosurgery end to end testing | Hadi Hasanzadeh | Medical Physicists | 2 | Jan-25 | 10.30-10.40 AM |
| 23 | The role of TiO ₂ nanoparticles in the individual dosimetry of Yttrium-90 Transarterial Radioembolization using Cherenkov Luminescence Imaging. | Asra Sadat Talebi | Medical Physicists | 3 | Jan-25 | 10.30-10.40 AM |
| 24 | Dosimetric effect of isocenter displacement simulation on 3D and IMRT plans in brain tumor patients | Sedigheh Taghizadeh | Medical Physicists | 4 | Jan-25 | 10.30-10.40 AM |
| 25 | Survival Rate Prediction in Glioblastoma Patients Using Radiomics Extracted from Post-Contrast Magnetic Resonance Images: Comparison of Multiple Machine Learning Models | Amirreza Sadeghi Nasab | Medical Physicists | 5 | Jan-25 | 10.30-10.40 AM |
| 26 | Novel Chemo-Photothermal Therapy in Breast Cancer | Hossein Rafta | Medical Physicists | 1 | Jan-25 | 10.40-10.50 AM |
| 27 | Sono-sensitivity and radio-sensitivity of methylene blue with apigenin-coated gold nanoparticles on MCF7 cells | Zeinab Hormozi | Medical Physicists | 2 | Jan-25 | 10.40-10.50 AM |

| poster number | Title | Author | Field | Monitor | day | time |
|---------------|--|-----------------------|--------------------|---------|--------|----------------|
| 28 | Evaluation of Monaco Treatment Planning System by Use of American Association of Physicists in Medicine Task Group-119 Test Cases | Vida Rezaei | Medical Physicists | 3 | Jan-25 | 10.40-10.50 AM |
| 29 | Ionometric scaling factors measurement inside a new water-equivalent plastic phantom for electron dosimetry purposes | Hamid Reza Baghani | Medical Physicists | 4 | Jan-25 | 10.40-10.50 AM |
| 30 | An Innovative Approach to Individual Dosimetry in Yttrium-90 Transarterial Radioembolization Utilizing Cherenkov Luminescence Imaging | Asra Sadat Talebi | Medical Physicists | 5 | Jan-25 | 10.40-10.50 AM |
| 31 | Zap-X: Advances in next-generation radiosurgery for brain tumors and benign brain conditions | Amirreza Lotfi Koshki | Medical Physicists | 1 | Jan-25 | 14.00-14.10 |
| 32 | Evaluation of resveratrol-loaded polymeric based nanocapsule mitigation effect on radiation-induced hematopoietic system and intestine injury after whole body exposure to X-ray radiation in mice | Mohammad Mohammadi | Medical Physicists | 2 | Jan-25 | 14.00-14.10 |
| 33 | Sensitivity Analysis of Field Width on quality and treatment time for brain hypo-fractional treatment | Farzaneh Hajalikhani | Medical Physicists | 3 | Jan-25 | 14.00-14.10 |
| 34 | Individual dosimetry in radionuclide therapy with actinium-225, thorium-227, and radium-223 by the utilization of Cherenkov radiations | Asra Sadat Talebi | Medical Physicists | 4 | Jan-25 | 14.00-14.10 |
| 35 | The knowledge-based organ at risk dose estimation in 3D conformal radiation therapy of breast cancer | Mostafa Robotjazi | Medical Physicists | 5 | Jan-25 | 14.00-14.10 |
| 36 | Family Caregiver Experiences of Terminal Cancer Caregiving Trajectory: A Qualitative Study in Palliative Care Setting | Masoud Rezaei | Nurse | 1 | Jan-25 | 14.10-14.20 |
| 37 | Effect of group therapy on anxiety, depression and stress of women with breast cancer; a systematic review | Mobina Imandust | Nurse | 2 | Jan-25 | 14.10-14.20 |
| 38 | Personalized Cancer Care Journey, at Home | Fatemeh Kheiry | Nurse | 3 | Jan-25 | 14.10-14.20 |
| 39 | How can we communication at terminal stage of cancer to patient? | Elham Mirshah | Nurse | 4 | Jan-25 | 14.10-14.20 |
| 40 | The Effect of Spiritual Care on Posttraumatic Growth in Mothers of Children with Cancer: A mixed method study | Sherafat Akaberian | Nurse | 5 | Jan-25 | 14.10-14.20 |
| 41 | Motor Exercises Effect on Improving Shoulders Functioning, Functional Ability, Quality of Life, Depression and Anxiety For Women With Breast Cancer | Vida Shafipour | Nurse | 1 | Jan-25 | 14.20-14.30 |

| poster number | Title | Author | Field | Monitor | day | time |
|---------------|--|--------------------------|----------|---------|--------|----------------|
| 42 | Effect of remote training and support on sleep quality and insomnia severity of cancer patients undergoing chemotherapy | Elahe Sarlak | Nurse | 2 | Jan-25 | 14.20-14.30 |
| 43 | The Impact of Acupressure on P6 and K-K9 Points on Nausea and Vomiting in Chemotherapy Patients: A Review Study | Zahra Arbabi | Nurse | 3 | Jan-25 | 14.20-14.30 |
| 44 | A review of patients' and treatment team's viewpoints about home chemotherapy | Sanaz Abdolrezapour | Nurse | 4 | Jan-25 | 14.20-14.30 |
| 45 | Assessing the compliance of educational curricula of selected disciplines with the content standards of cancer-related palliative care | Zahra Ebadinejad | Nurse | 5 | Jan-25 | 14.20-14.30 |
| 46 | The Relationship between Uncertainty in Illness and Social Support among Elderly with Prostate Cancer | Ahmad Mahdizadeh | Nurse | 1 | Jan-26 | 10.20-10.30 AM |
| 47 | Health-Promoting Lifestyle among the Survivors of Colorectal Cancer: An Integrative Review | Elahe Ramezanzade Tabriz | Nurse | 2 | Jan-26 | 10.20-10.30 AM |
| 48 | Evaluating the psychometric properties of the Persian version of the Healthy Lifestyle Instrument for Breast Cancer Survivors (HLI-BCS) | Elahe Ramezanzade Tabriz | Nurse | 3 | Jan-26 | 10.20-10.30 AM |
| 49 | Sexual Experience of Iranian Women with Cancer: A Qualitative Content Analysis | Seyedeh Esmat Hosseini | Nurse | 4 | Jan-26 | 10.20-10.30 AM |
| 50 | Exploration of the Strategies of Iranian Nurses in Providing Palliative Care to Children with Cancer: A Qualitative Study | zahra ebadinejad | Nurse | 5 | Jan-26 | 10.20-10.30 AM |
| 51 | Challenges and educational needs of Clinical oncology and surgical oncology Residents in tumor board meetings, a qualitative study | Parnian Boroonsara | Oncology | 1 | Jan-24 | 10.20-10.30 AM |
| 52 | Prevalence of Depression and Related Factors in Patients with Colorectal Cancer in Mashhad, Iran, 2022-2023 | Parnian Boroonsara | Oncology | 2 | Jan-24 | 10.20-10.30 AM |
| 53 | A Phase III Randomized Clinical Trial Study of Chemoradiation using Lovastatin/Cisplatin in Patients with Head and Neck Squamous Cell Carcinoma | Sasan Razmjoo | Oncology | 3 | Jan-24 | 10.20-10.30 AM |
| 54 | Therapeutic and prophylactic effects of radiation therapy in the management of recurrent granulation tissue induced tracheal stenosis: a review on the role of Endobronchial brachytherapy and external beam radiation therapy | Sasan Razmjoo | Oncology | 4 | Jan-24 | 10.20-10.30 AM |

| poster number | Title | Author | Field | Monitor | day | time |
|---------------|---|----------------------------|--------------|---------|--------|----------------|
| 55 | Risk of relapse and death from colorectal cancer and its related factors using non-Markovian Multi-State model | Saeedeh Hajebi Khaniki | Oncology | 5 | Jan-24 | 10.20-10.30 AM |
| 56 | Uncovering the Intangible Heterogeneity of Gene Effects in the Survival Time of Cancer Patients | Saeedeh Hajebi Khaniki | Oncology | 1 | Jan-24 | 10.30-10.40 AM |
| 57 | 18F-DCFPyL (PSMA) PET as a radiotherapy response assessment tool in metastatic prostate cancer | Mohammad Gouran-savadkoohi | Oncology | 2 | Jan-24 | 10.30-10.40 AM |
| 58 | Prostate Cancer Diagnosis with Transrectal Ultrasound-guided Biopsy: Results of Screening in Patients Supported by Relief Foundation in Guilan Province | Fateme Sheida | Oncology | 3 | Jan-24 | 10.30-10.40 AM |
| 59 | Prostate-Specific Membrane Antigen (PSMA) Expression Predicts Need for Early Treatment in Prostate Cancer Patients Managed with Active Surveillance | Mohammad Gouran-savadkoohi | Oncology | 4 | Jan-24 | 10.30-10.40 AM |
| 60 | Description of disease progression in pathologic complete response patients following rectal cancer surgery: A long-term study | Fatemeh Shahabi | Oncology | 5 | Jan-24 | 10.30-10.40 AM |
| 61 | Evaluation of Perceived Barriers and Benefits of breast cancer screening in women participated in the PERSIAN Guilan Cohort Study (PGCS) | Fateme Sheida | Oncology | 1 | Jan-24 | 10.40-10.50 AM |
| 62 | Cardiac safety of Trastuzumab in breast cancer patients with left ventricular dysfunction | Mina Mohseni | Oncology | 2 | Jan-24 | 10.40-10.50 AM |
| 65 | Current Insights into FLASH Radiotherapy Progress | Saeed Dabirifar | Radiobiology | 1 | Jan-26 | 10.30-10.40 AM |
| 66 | The effect of cobalt chloride (CoCl ₂)-induced hypoxia on radioresistance and hypoxia-related genes pattern in human glioblastoma cell line | Elham Khakshour | Radiobiology | 2 | Jan-26 | 10.30-10.40 AM |
| 67 | Prediction of attention decline toxicity after radiotherapy for brain metastasis patients in Velayat Zahedan Radiotherapy Center | Fatemeh Hashemzaei | Radiobiology | 3 | Jan-26 | 10.30-10.40 AM |
| 68 | The Role of Cu-Cy NPs, Cisplatin, and Radiation in Promoting Apoptosis and Preventing Migration in Cervical Cancer Cells | Mahsa Ejtema | Radiobiology | 4 | Jan-26 | 10.30-10.40 AM |

| poster number | Title | Author | Field | Monitor | day | time |
|---------------|---|------------------------|--------------|---------|--------|----------------|
| 69 | Cytotoxic and cytostatic study of the effects of antioxidants on lymphocytes of luminal A and luminal B breast cancer patients irradiated in vitro | Hossein Mozdarani | Radiobiology | 5 | Jan-26 | 10.30-10.40 AM |
| 70 | Patient radiation biological risk in dual-energy computed tomography procedure | Arash Safari | Radiobiology | 1 | Jan-26 | 10.40-10.50 AM |
| 71 | Magnetic Nanoparticles in hyperthermia | Fatemeh Moradi | Radiobiology | 2 | Jan-26 | 10.40-10.50 AM |
| 72 | Advancing Cancer Therapy: The Role of Diet-Derived Compounds in Radiotherapy | Saeed Dabirifar | Radiobiology | 3 | Jan-26 | 10.40-10.50 AM |
| 73 | Comparative between two nanoparticles, Biosynthesizing Selenium Nanoparticles by Gum Arabic and Poly Anionic Cellulose against radiation on Chinese Hamster Ovary (CHO) Cells | Mojgan Hasanzade | Radiobiology | 4 | Jan-26 | 10.40-10.50 AM |
| 74 | Altering Tumor Microenvironment of Colon Cancer by Intra-Tumor Injection of Serum Originating from EAE Animals; an In-vivo Study | Erfan Basirat | Radiobiology | 5 | Jan-26 | 10.40-10.50 AM |
| 75 | The effects of medical linear accelerator X-rays on human peripheral blood lymphocytes in the presence of glucosamine | Saeed Rezapoor | Radiobiology | 1 | Jan-24 | 14.30-14.40 |
| 76 | Analysis and effectiveness of music therapy on stress, anxiety, and depression in cancer patients at Vasei Hospital in 1401 | Saba Ordibeheshti | Radiobiology | 2 | Jan-24 | 14.30-14.40 |
| 77 | A Randomized, Controlled, Parallel-Group, Trial on the Long-term Effects of Melatonin on Fatigue Associated With Breast Cancer and Its Adjuvant Treatments | Fateme Sheida | Oncology | 3 | Jan-24 | 14.30-14.40 |
| 78 | Recent insight into the adaptive response effect induced by the stimulation of DNA double-strand break repair | Sonia Farhadi | Radiobiology | 3 | Jan-24 | 10.40-10.50 AM |
| 79 | Exploring the Impact of Delayed Postoperative Radiotherapy on Relapse and Metastasis in Female Breast Cancer Patients: Insights from Penalized Cox Regression | Saeedeh Hajebi Khaniki | Radiobiology | 4 | Jan-24 | 10.40-10.50 AM |
| 80 | Evaluating the relationship between erectile dysfunction and dose received by the penile bulb during definitive radiotherapy of low-risk prostate cancer; A prospective cross-sectional study | Masoumeh Nouri | Oncology | 1 | Jan-24 | 14.40-14.50 |

Dosimetric impact of collimator rotation on volumetric modulated arc therapy and intensity modulated radiotherapy for rectal cancer patients

Amin Banaei^{1*}, Razzagh Abedi-Firouzjah², Mehrsa Majdaeen³

1. Department of Medical Physics, Faculty of Medical Sciences, Tarbiat Modares University
2. Department of Medical Physics, radiobiology and radiation protection, School of medicine, Babol University of medical Sciences
3. Department of Radiotherapy and Oncology, Razi Hospital, Rasht, Iran

* Corresponding Author: Amin Banaei, Department of Medical Physics, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran. Email: amin.banaei@modares.ac.ir

Introduction:

Intensity Modulated Radiotherapy (IMRT) and Volumetric Modulated Arc Therapy (VMAT) are primary techniques for rectal cancer treatment. In radiotherapy planning, collimator rotation is a crucial parameter, and its adjustments can lead to dosimetric variations. This study examined the influence of collimator rotation on dosimetric outcomes for different IMRT and VMAT plans for rectal cancer.

Material & Methods:

CT images from 20 male rectal cancer patients were used for IMRT and VMAT treatment planning with varying collimator angles. Nine IMRT techniques (5, 7, and 9 coplanar fields with collimator angles of 0°, 45°, and 90°) and six VMAT techniques (1 and 2 full coplanar arcs with collimator angles of 0°, 45°, and 90°) were planned for each patient. Dosimetric results for target tissue (conformity index [CI] and homogeneity index [HI]) and sparing of organs at risk (OARs) (parameters from OARs dose-volume histograms [DVH]) were analyzed and compared, along with radiobiological findings.

Results:

The 7-fields IMRT technique showed lower bladder doses (V40Gy, V45Gy) unaffected by collimator rotation. The 9-fields IMRT and 2-arcs VMAT (excluding the 90-degree collimator) exhibited the lowest V35Gy and V45Gy. A 90-degree collimator rotation in 2-arcs VMAT significantly increased small bowel and bladder V45Gy, femoral head doses, and HI values. Radiobiologically, the 90-degree rotation adversely affected small bowel NTCP (normal tissue complication probability). No superiority was observed for a 45-degree collimator rotation over 0 or 30 degrees in VMAT techniques.

Conclusion:

Collimator rotation minimally impacted dosimetric parameters in IMRT planning but significantly affected VMAT techniques. A 90-degree rotation in VMAT, especially in a 2-full arc technique, negatively impacted PTV homogeneity index, bladder dose, and small bowel NTCP. Other evaluated collimator angles did not significantly affect VMAT dosimetrical or radiobiological outcomes.

Keywords: Rectal cancer, Intensity-modulated radiotherapy, Volumetric modulated arc therapy, Collimator, Radiobiologic parameters, Dosimetric parameters

Hippocampus Sparing in Whole Brain Radiotherapy: Dosimetric Study Between 3D-conformal, IMRT and VMAT

Dr. Fatemeh Seif ¹, Dr. Mohamadreza Bayatiani ¹

1. Associate professor, Arak University of Medical Sciences and Khansari Hospital, Arak, Iran.

Introduction:

Whole Brain Radiotherapy (WBRT) is one of the methods used alone or in combination with other treatments for adults with multiple brain metastases. In WBRT receiving dose by organs at risk (OARs) as well as hippocampus is inevitable. Sparing of OARs such as cochleae, parotid glands, orbits, lenses, ear canals, scalp can cause to reduction of toxicities for patients treated with WBRT. It is evident that radiation damage to hippocampus can cause to neurocognitive deficits, so it is recommended that the hippocampus in WBRT be considered as an OAR. The aim of this study is comparison dosimetrically between 3D-conformal, intensity-modulated radiotherapy (IMRT) and volumetric-modulated arc therapy (VMAT) in good coverage of planning target volume (PTV) and sparing of organs at risk (OARs) and hippocampus.

Method:

Ten patients previously treated with 3D-conformal WBRT with Elektra Versa_HD linac by using parallel opposed lateral beams were retrospectively re-planned using IMRT (seven beams) and VMAT (two arcs) techniques with OARs and hippocampal sparing. Prescription dose was 30Gy in 10 fractions for all patients. For each technique Dose-volume histogram (DVH), conformity index (CI) and homogeneity index (HI) of PTV, hippocampus D100% and mean and maximum dose and other OARs were calculated and compared.

Results:

As expected the hippocampus is not spared in 3D-conformal radiotherapy. According to the RTOG 0933 protocol the constraints were used for hippocampi sparing in IMRT and VMAT plans including mean and maximum dose and the dose to hippocampi of 100% of the volume (D100% 9Gy). The mean dose of the hippocampus was 14.3 ± 0.4 Gy and 15.6 ± 0.6 Gy in VMAT and IMRT respectively. The maximum hippocampus dose was 15.2 ± 0.5 Gy and 17.1 ± 0.4 Gy in VMAT and IMRT respectively. The D100% of the hippocampus was 8.45 ± 0.3 Gy and 8.81 ± 0.4 Gy in VMAT and IMRT respectively.

Conclusion:

VMAT resulted in the lowest maximum, mean and D100% values for the hippocampus and in overall showed the best PTV coverage and sparing of OARs in WBRT. Hippocampus sparing with VMAT can cause reduction in cognitive decline.

Keywords: Hippocampus Sparing, Whole Brain Radiotherapy, 3D-Conformal, IMRT, VMAT

Beam quality and the mystery behind the lower percentage depth dose in grid therapy

Amir Hossein Karimi^{1,2}, Nahid Chegeni³, Iraj Jabbari⁴, Fatemeh Jafari¹, Ghazale Geraily^{1,2}, Indra J Das⁵

1. Cancer Institute, Imam Khomeini Hospital Complex, Tehran University of Medical Sciences, Tehran, Iran.
2. Department of Medical Physics and Biomedical Engineering, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran.
3. Department of Medical Physics, School of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran.
4. Department of Nuclear Engineering, Faculty of Physics, University of Isfahan, Isfahan, Iran.
5. Department of Radiation Oncology, Northwestern Memorial Hospital, Northwestern University Feinberg School of Medicine, Chicago, IL, USA.

Introduction:

Grid therapy recently has been picking momentum due to favorable outcomes in bulky tumors. This is being termed as Spatially Fractionated Radiation Therapy (SFRT) and lattice therapy. SFRT can be performed with specially designed blocks made with brass or cerrobend with repeated holes or using multi-leaf collimators. Aim: The main challenge is the mystery behind the lower PDD (percentage depth dose) in grid fields. The knowledge about the beam quality, indexed by TPR_{20/10} (Tissue Phantom Ratio), is also necessary for absolute dosimetry of grid fields. Since the grid may change the quality of the primary photons, a new $k_{(q,q_0)}$ should be requested for absolute dosimetry of grid fields. The present Monte Carlo (MC) study was devoted to resolving the questions.

Method:

In this study, the main components of a typical medical linac in 6 MV mode were considered to be simulated using MCNPX® code. Additionally, a commercial grid therapy device was used to simulate the grid fields. After validation of the MC model, output factor, depth of maximum dose, PDDs, dose profiles, TPR_{20/10}, electron and photon spectra were compared between open and grid fields.

Results:

The results demonstrated that output factors for grid fields are 0.2 ± 0.05 lower than in open fields. The d_{max} is the same for open and grid fields. The difference in TPR_{20/10} of open and grid fields is observable (~5%).

Conclusion:

TPR_{20/10} is still a good index for the beam quality in grid fields and consequently choose the correct $k_{(q,q_0)}$ in measurements. The lower depth dose (~10%) in grid therapy is due to lower depth fluence with scatter radiation but it does not impact the dosimetry as the calibration parameters are insensitive to the effective beam energies. Standard dosimetry in open beam based on international protocol could be used.

Keywords: Grid therapy, Small field dosimetry, Spectrometry, Monte Carlo, Linac

Comparison of Computed Tomography and Magnetic Resonance Imaging in cervical cancer brachytherapy with dosimetric and clinical parameters

Fatemeh Mohammadian¹

1. Department of Radiotherapy, Faculty of Medicine, Ahvaz Jundishapur University of Medical ScienceIntroduction

Introduction:

The aim of this study was to evaluate the relative deviation of dose-volume(DVH) parameters for the high-risk clinical target volume(HRCTV) and organ at risk (OARs) using computed tomography (CT) versus magnetic resonance imaging (MRI) in cervical cancer brachytherapy.

Method:

In this study, we analyzed 24 patients with pathologically confirmed cervical carcinoma using CT and MR images. The HRCTV and OARs, including the rectum, bladder and sigmoid, were outlined on both images. We calculated the dice coefficient of similarity (DSC) score, and the volume, height, width, and dose parameters including D90, D98, D100 for HRCTV, and dose-volume parameters of OARs including D0.1cc, D1cc, and D2cc. Additionally, we examined the relationship between body mass index (BMI) and the dose parameters.

Results:

There was strong correlation between CT and MR images for the bladder ($r=0.72$) and rectum ($r=0.83$) except for the D0.1cc of the bladder. However, there was a poor correlation between the doses of HRCTV for CT and MRI plans for DVH parameters such as D90,D98, and D100.The mean DSC range was between 75.13% for the bladder, 64.13% for the rectum,56.71% for the sigmoid, and 66.54% for HRCTV.

Conclusion:

MRI is currently considered the gold standard for tumor delineation. However, CT with clinical information can also provide comparable results, which merit further investigation. When planning treatment, it may be necessary to consider both MRI and CT in order to make an informed decision.

Keywords: CT, MRI, dose-volume histogram, cervical cancer, brachytherapy

Mirafos®: A combination of natural and chemical antioxidants capable of radiosensitizing tumor cells and radioprotector of normal tissue

Hossein Mozdarani¹

1. Department of Medical Genetics, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran.

Introduction:

Ionizing radiation used for radiotherapy of cancer pose side effects on normal tissue that intervene in the process of radiotherapy. Short term effects such as leukopenia and thrombocytopenia lead to immunodeficiency. Long term effects such as infertility, secondary cancers and transgenerational genetic diseases are other side effects of radiotherapy. Despite long time efforts toward introducing a chemical or natural radioprotector to combat side effects of radiotherapy, little success was achieved so far. Moreover, radiation oncologists are reluctant to use chemical radioprotectors for cancer patients because they think it might intervene with the effect of ionizing radiation on tumor.

Method:

Mirafos®, an orally administrable drug with patented ingredient is a mixture of chemical and natural antioxidative agents that was tested for genotoxicity and cytotoxicity on various tissue types in vivo and in vitro. The end points used in the preclinical study of this drug were of DNA damage, micronucleus assay, chromosomal aberration assay, MTT and cell survival assay alone or in the form of mixed agents. Results were analyzed with appropriate statistical tests for significances.

Results:

Results of cytochrome assay, cell survival, MTT assay, DNA damage and micronucleus assay indicated that some ingredients when administered in combination act as a powerful radioprotector on normal tissues and cells, while some of them induce radiosensitivity when using cells with genome instability such as lymphocytes of breast cancer patients. These agents have no protective effect on normal cells against radiation.

Conclusion:

Mirafos®, was found a dual action drug with different ingredients that act as both radioprotector of normal tissue and a radiosensitizer of tumor tissue. When administered, accumulation of Mirafos® lead to higher efficacy of radiation on tumor cells and on the other side protecting the normal tissue from side effects of ionizing radiation. This differential effect may lead to higher therapeutic gain factor. Other important features of Mirafos® are oral administration route, stability in ambient condition, and low cost. It may also lower the risk of secondary cancer due to radiotherapy by protection of normal tissues.

Keywords: Radioprotection, radiosensitizer, genotoxicity, tumor radiotherapy, Mirafos®

Investigating factors related to advanced care planning in the elderly in a cross-sectional study in Iran

Mobina Golmohammadi¹, Salman Barasteh², Mohsen Mollahadi³, Shadi Baba Ali⁴, Abbas Ebadi³

1. Nursing Faculty, Baqiyatallah University of Medical Sciences, Tehran, Iran
2. Health Management Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran
3. Behavioral Sciences Research Center, Exercise Physiology Research Center, Life Style Institute, Baqiyatallah University of Medical Sciences, Tehran, Iran
4. Department of Internal Medicine, Imam Khomeini Hospital complex, Tehran University of Medical Sciences, Tehran, Iran

Introduction:

Elderly is a phenomenon in the 21st century in developed and developing countries, which is considered as a silent revolution. Studies show that the end-of-life care needs of elderly patients are not well taken into account, considering that palliative care is done with the aim of improving the quality of life of patients with life-threatening diseases and their families, one of the most important priorities in palliative care includes discussion And the discussion is about patients' desire to receive palliative care and their preferences regarding end-of-life issues, which is called advanced care planning. Therefore, the aim of this study is to investigate the factors related to advanced care planning

Method:

This cross-sectional descriptive study was conducted in 2021-2022 in four hospitals in Tehran and with 390 eligible elderly people using available sampling method. The instrument used was the Persian version of the Advanced Care Planning Questionnaire and related factors It was determined by advanced care planning with multivariate linear regression test.

Results:

The results show that the availability of advanced care planning services, discussions about it with others, patients' attitudes about advanced care planning and disease experience are 35% predictors of patients' feelings towards advanced care planning. There is a significant relationship between demographic variables such as income, marital status, gender and education of patients with advanced care planning

Conclusion:

Considering that the factors related to advanced care planning can be different from one person to another and affected by different conditions, therefore with proper training of the treatment team and the knowledge and attitude that patients can acquire about advanced care planning, it is possible to achieve specialized care at the end of life and respect the dignity of patients.

Keywords: advanced care planning, elderly, end of life care

Patient-specific geometrical distortion corrections of MRI images improve dosimetric planning accuracy of vestibular schwannoma treated with gamma knife stereotactic radiosurgery

Mojtaba Safari^{1,2}, Ali Fatemi^{3,4}, Younes Afkham⁵, Louis Archambault^{1,2}

1. Département de physique, de génie physique et d'optique, et Centre de recherche sur le cancer, Université Laval, Québec, Québec, Canada
2. Service de physique médicale et de radioprotection, Centre Intégré de Cancérologie, CHU de Québec-Université Laval et Centre de recherche du CHU de Québec, Québec, Québec, Canada
3. Department of Physics, Jackson State University, Mississippi, USA
4. Merit Health Central, Department of Radiation Oncology, Gamma Knife Center, Mississippi, USA
5. Clinical Research Development Unit of Tabriz Valiasr Hospital, Tabriz University of Medical Science, Tabriz, Iran

Introduction:

To investigate the impact of MRI patient-specific geometrical distortion (PSD) on the quality of Gamma Knife stereotactic radiosurgery (GK-SRS) plans of the vestibular schwannoma (VS) tumors.

Method:

Three open access datasets including the MPILeipzig Mind-Brain-Body (318 patients), the slow event-related fMRI designs dataset (62 patients), and the VS dataset (242 patients) were used. We used first two datasets to train a 3D convolution network to predict the distortion map of third dataset that were then used to calculate and correct the PSD. GK-SRS plans of VS dataset were used to evaluate dose distribution of PSD-corrected MRI images. GK-SRS prescription dose of VS cases was 12 Gy. Geometric and dosimetric discrepancies were assessed between the dose distributions and contours before and after the PSD corrections. Geometry indices were center of the contours, Dice coefficient (DC), Hausdorff distance (HD), and dosimetric indices were D_{50} , D_{max} , D_{min} , and $D_{95\%}$ doses, target coverage (TC), Paddick's conformity index (PCI), Paddick's gradient index (GI), and homogeneity index (HI).

Results:

Geometric distortions of about 1.2 mm were observed at the air-tissue interfaces at the air canal and nasal cavity borders. Average center of the targets was significantly distorted along the frequency encoding direction after the PSD correction. Average DC and HD metrics were 0.90 and 2.13 mm. Average D_{50} , $D_{95\%}$, and D_{min} in Gy significantly increased after PSD correction from 16.85 to 17.25, 12.30 to 12.77, and from 8.98 to 9.92. D_{max} did not significantly change after the correction. Average TC and PCI significantly increased from 0.97 to 0.98, and 0.94 to 0.96. Average GI decreased significantly from 2.24 to 2.15 after PSD correction. However, HI did not significantly change after the correction.

Conclusion:

The proposed method could predict and correct the PSD that indicates the importance of PSD correction before GK-SRS plans of the VS patients.

Keywords: deep learning, field mapping, image quality, precision radiation therapy, susceptibility variations

Quality of life assessment among older adult patients with chronic wounds

Hamed Savadkoohi¹, Salman Barasteh², Mahdi Akbarzadeh Amirdehi³

1. Student research committee, Shahid Beheshti University of medical sciences, Tehran, Iran
2. Health Management Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran
3. The Head of Wound and Ostomy Department, Baqiyatallah Hospital, Tehran, Iran

Introduction:

Patients with chronic wounds experience various biopsychosocial problems which severely affects their quality of life (QOL). Thus, a Persian instrument to assess the QoL of these patients is required. This study aimed to determine the psychometric properties of the Persian version of the wound-QOL questionnaire.

Method:

This methodological study was performed on Iranian patients during 2021-2022. The translation was carried out via forward-backward method. Face validity was addressed with 10 patients and content validity with 12 wound specialists. Construct validity was also assessed by performing exploratory factor analysis (EFA) ($n = 100$) and convergent validation with EQ-5D-3L plus Pain VAS Score and known-groups validity. The reliability was assessed by internal consistency using Cronbach's alpha coefficient and test-retest.

Results:

A total of 100 patients with chronic wounds were included in the study. Two factors with cumulative variance of 65.39% were extracted during EFA. The results revealed a significant and high correlation between the total scores of wound-QOL questionnaire, the Persian version of EQ-5D-3L ($p = 0.000$, $r = 0.502$), and Pain score (0-10; $p = 0.000$, $r = 0.627$). The Cronbach's alpha was 0.743 and stability of the questionnaire ($\alpha = 0.872$) was confirmed. In confirming the known-groups validity, the results showed that this tool can differentiate the QOL of patients with different wounds

Conclusion:

The Persian version of the wound-QOL questionnaire is a valid and reliable questionnaire which can measure the QoL of patients with chronic wounds. This instrument can be used in clinical evaluation as well as research purposes across the Iranian population

Keywords: EQ-5D-3L; Iran; Persian; chronic wound; quality of life; reliability; validation; wound-QOL questionnaire.

Dosimetric comparison of 3D Conformal Radiotherapy, IMRT and Tomotherapy plans in Nasopharyngeal Cancer

Rasoul sogandi¹, Alireza Farajollahi^{2,3*}, Sara Abdollahi^{4,5}, Mikaeil Molazadeh^{2,3}, Farideh Jamali⁵, Saba Ziyaee⁶

1. Nutrition Research Center, Tabriz University of Medical Sciences, Tabriz, Iran
 2. Department of Medical Physics, Faculty of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran
 3. Radiotherapy department, Shahid Madani University hospital, Tabriz University of Medical Sciences, Tabriz, Iran
 4. Physics Department, Faculty of Science, Ferdowsi University of Mashhad, Mashhad, Iran
 5. Medical Physics Department, Reza Radiotherapy and Oncology Center, Mashhad, Iran
 6. Department of Medical Physics, School of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran
- * Corresponding Author: Alireza Farajollahi

Introduction:

Nasopharyngeal Cancer (NPC) is one of the most common head and neck cancers. Approximately 68% of NPC patients suffer from locally advanced disease at the time of diagnosis. The purpose of this study is to compare and evaluate the dosimetric parameters of Three-Dimensional Conformal Radiotherapy (3D-CRT), step-and-shoot Intensity Modulated Radiation Therapy (SaS-IMRT) and Helical Tomotherapy (HT) in advanced NPC to help choose the optimal technique for nasopharyngeal patients.

Method:

A retrospective study was conducted involving 10 patients with advanced NPC who were re-planned using HT, SaS-IMRT and 3D-CRT techniques. All three techniques were optimized to deliver 70 Gy in 33 fractions simultaneously to the primary tumor and metastatic lymph nodes, and 59.4 Gy in 33 fractions to the high-risk regions. The dosimetric parameters of the Planning Target Volumes (PTVs) and Organs at Risks (OARs), along with treatment time, were evaluated and compared using the paired-samples t-test.

Results:

HT significantly possessed better target homogeneity, conformity and better mean dose compared to 3D-CRT and SaS-IMRT. Also, reduced the dose delivered to OARs compared with 3D-CRT. Although in compared with SaS-IMRT and HT, 3D-CRT reduced the treatment delivery time by 51.5% and 44.05% respectively, but worse in tumor coverage and dosimetric accuracy and protection of some OAR compared with SaS-IMRT and HT.

Conclusion:

Despite the HT achieving optimal conformity, homogeneity for PTV coverage, and optimal OARs sparing, shorter treatment times for 3D-CRT reduce the probability of patient movement and discomfort. The findings of this study can offer guidance for selecting suitable radiation technologies for treating patients with advanced NPC.

Keywords: 3D-CRT, Nasopharyngeal Cancer, Helical Tomotherapy, step-and-shoot IMRT.

Exploring the Beam Modeling Algorithm in Patient-Specific IMRT Quality Assurance

Hadi Keivan¹, Reza Maskani¹, Elaheh Tarighati²

1. Shahroud University of Medical Sciences
2. Iran University of Medical Science

Introduction:

The main objective of this study is to assess the dosimetric accuracy in the delivery of intensity-modulated radiation therapy (IMRT) and its impact on patient-specific quality assurance (QA). Specifically, the focus is on the verification of treatment plans in a phantom geometry, known as pretreatment patient-specific QA, for small fields. Small fields present challenges in accurately modeling their dosimetric characteristics in treatment planning systems (TPS) and transferring them to treatment delivery. This study aims to investigate how imprecise beam modeling of small fields in TPSs affects patient-specific IMRT QA. Two different dose calculation algorithms used in commercial TPSs are evaluated, and the impact of imprecise extrapolation of small field parameters on IMRT QA is studied.

Method:

Experimental measurements were conducted using a Siemens Artiste linear accelerator with different field sizes. The behaviors of two different dose calculation algorithms were analyzed using a 2D diode array, specifically the MapCHECK2 system from Sun Nuclear Corporation. Planar dose comparison between the TPSs and the 2D array was performed for fields involving small segments, and the percentage of points that passed the acceptable gamma criteria was calculated. The gamma criteria used were a 3% dose difference and a 3mm distance-to-agreement (DTA) with a 10% dose threshold.

Results:

The study demonstrated that the collapsed cone convolution/superposition algorithm (CCCS) used in the Prowess TPS accurately models the small nonequilibrium IMRT segments compared to the full scatter convolution (FSC) algorithm used in the TiGRT TPS. Gamma analysis of the calculated and measured dose distributions showed that the gamma index pass rate for small segments designed by Prowess was good. However, the results obtained by TiGRT showed a significant difference in average segment size below 3×3 cm², indicating imprecise beam modeling of small fields by FSC.

Conclusion:

Based on the conducted studies, it can be concluded that there is a direct relationship between the dose calculation algorithm, beam modeling of small fields, and patient-specific QA. The choice of dose calculation algorithm and accurate beam modeling for small fields are crucial factors in ensuring dosimetric accuracy in IMRT treatment delivery.

Keywords: IMRT quality assurance, small IMRT segment, dose calculation algorithm

Evaluation of the relationship between the complexity of Intensity Modulated Radiation Therapy of head and neck plans and results of Quality Assurance with the help of phantom measurements and determination of complexity threshold values

Fatemeh zahra Nosrati¹, Mohsen Bakhshandeh², Mahdi Ghorbani³, Ali Shabestani Monfared⁴, Soraya Khafri⁵

1. Babol University of Medical Sciences, Babol, Iran
2. Faculty of Allied Medical Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran
3. Biomedical Engineering and Medical Physics, Department School of Medicine, Shahid Beheshti University of Medical Science, Tehran, Iran
4. Cancer Research Center, Health Research Institute, Babol University of Medical Sciences, Babol, Iran
5. Social Determinants of Health Research Center, Health Research Institute, Babol University of Medical Sciences, Babol, Iran

Introduction:

Intensity-modulated radiation therapy (IMRT) is an effective technique for the treatment of all types of tumors, especially in the head and neck region. Modulation Complexity score (MCS) is a tool for predicting the delivery and accuracy of treatment plans, which are determined in the range of 0-1. The gamma passing criterion is used to evaluate the dose values measured by phantom and the dose calculated by the treatment planning system. Determining the range of the complexity factors in treatment plans can help to predict the results of quality assurance and prevent the creation of complex plans. Thus, the present study aims to investigate head and neck treatment plans with the IMRT technique and to perform quality assurance for each of them to determine the range of acceptable complexity.

Method:

The initial treatment plans of 30 head and neck cancer patients who were treated with IMRT using the Step-and-shoot method by the Ray Station treatment planning system were examined. Then MCS and PMU complexity indicators were coded and added to the treatment planning system. Then three treatment plans; A simple, standard, and complex treatment plan were created for patients. Quality assurance of the plans is done with Octavius 4D phantom, the implementation and the relationship of complexity and quality assurance results were compared with each other using gamma criteria of 3%/3mm

Results:

The results of the study showed that complex treatment plans had lower MCS and higher total MU and PMU than other treatment plans. With the increase of MU and the number of segments, complexity increases. There is a statistically significant relationship between the amount of MCS and PMU with the number of segments ($p=0.000$). The mean gamma pass rate in all treatment plans was more than 99% and its values were the highest in simple treatment plans and the lowest in complex treatment plans. A statistically significant relationship was not observed between the gamma pass and complexity parameters.

Conclusion:

MCS is a sensitive metric for distinguishing between complex, standard, and simple treatment plans. This criterion can be incorporated into the process of plan evaluation

Keywords: quality assurance of patient treatment plans, complexity of treatment plans, complexity index, complexity threshold value, IMRT

A multicenter, randomized, open-label, controlled trial to compare recurrence pattern of reduced margins vs RTOG protocol in adjuvant chemoradiation of high grade glioma

**Kazem Anvari¹, Parisa Rabiei¹, Seyed Alireza Javadinia², Danial Fazilat-Panah³,
Seyed Amir Aledavood¹, Sudabeh Shahidsales¹**

1. Cancer research center, Mashhad University of Medical Sciences
2. Sabzevar University of Medical Sciences
3. Babol University of Medical Sciences

Introduction:

The current standard treatment for high-grade glioma (HGG) Typically includes maximal surgical resection and adjuvant radiotherapy, with or without concurrent chemotherapy, followed by adjuvant chemotherapy. There is still some debate about the target delineation of HGG, and it continues to be a subject of investigation. This study aimed to assess the feasibility, safety, and efficacy of using a smaller margin of radiotherapy than what is recommended in the latest ESTRO/ACROP guideline for HGG.

Method:

In this multicenter, randomized, open-label, controlled trial, patients aged 18 to 75 years with grade 3 and 4 gliomas were enrolled following surgery. Eligible patients were randomly assigned to either the standard group, based on RTOG guidelines, or the intervention group, which utilized a smaller margin of 1 cm. They received a total dose of 60 Gy in two phases according to the RTOG protocol. After chemoradiation, patients underwent brain MRI every three months during follow-up. The recurrence pattern was determined by the 95% isodose line on the CT scan used for treatment planning at the time of imaging progression.

Results:

A total of 258 patients were randomly assigned to two groups. Both groups were similar in terms of age, gender, radiotherapy technique, IDH mutation status, type of surgery, surgery-radiotherapy interval, duration of adjuvant chemotherapy, GTV60 volume, and the volume of GTV46. Grade 4 tumors were more prevalent in the control group (31.3% vs. 18.8%, $p=0.02$). There was no significant difference in the in-field recurrence rates between the two groups (intervention: 84% vs. control: 83.8%, $p = 0.829$).

Conclusion:

Adjuvant radiotherapy of HGG with smaller margins does not compromise the recurrence pattern of the tumor. Therefore, it is safe to recommend a smaller margin in order to spare more normal brain tissue.

Keywords: high grade glioma, adjuvant radiotherapy, margin, target delineation

Evaluation of IMRT plan robustness in patients with localized prostate cancer using different setup uncertainty scenarios

Abolfazl Kanani ¹, Najmeh Ghatei ¹, Mohsen Bakhshandeh ²

1. Medical Physics Department, Pardis Cancer Institute, Shiraz, Iran
2. Department of Radiology Technology, Faculty of Allied Medical Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Introduction:

Robustness evaluation is increasingly used in radiotherapy planning to assess the degree of resiliency of the required dose distribution to the radiotherapy uncertainties. This study aimed to assess the impact of systematic setup uncertainty on intensity modulated radiation therapy (IMRT) plans in patients with localized prostate cancer using a plan robustness evaluation method.

Method:

Ten prostate patients previously treated with IMRT were selected for this study. Clinical target volume (CTV) to planned target volume (PTV) margins of 7 mm in all directions, except 4 mm posteriorly, were used. The original plans were normalized to PTV V98%>98%. Seven uncertainty plans were recalculated based on the 5 times setup errors acquired from electronic portal imaging device (EPID) and two worst-case scenarios. CTV, PTV, rectum, bladder, femoral heads, and penile bulb dose metrics were analyzed between the 10 O-plans 70 and U-plans. The dose differences of the O-plans and U-plans corresponded to the plan robustness for each structure.

Results:

The mean dose differences of D2cc, D95%, D98%, V95%, and V100% ($\Delta D2cc$, $\Delta D95\%$ and $\Delta D98\%$, $\Delta V95\%$ and $\Delta V100\%$,) of CTV were respectively 1.3 Gy, 3 Gy, 4.6 Gy, 4.2%, and 9.7%. The mean (SD) of worst-case for CTV V95% and CTV V100% were 97.4% (4.0%) and 90.3% (6.7%). The $\Delta Dmax$, $\Delta D95\%$, and $\Delta D98\%$ of PTV were 1.2 Gy, 12.1 Gy, and 17.4 Gy, respectively. CTV exhibited more strong robustness than PTV. In rectum, $\Delta V60Gy$ and $\Delta V70Gy$ were 20.9% and 15.1%. The mean (SD) of worst-case rectum for V60 and V70 were 24.2% (8.7%) and 16.0% (6.1%). Both $\Delta V60Gy$ and $\Delta V65Gy$ were 14.6% for bladder. The mean (SD) of worst-case bladder for V60 and V65 were 24.2% (5.4%) and 24.6% (6.3%). $\Delta D1\%$ and $\Delta D90\%$ were 6.5 Gy and 20.3 Gy for femoral heads and penile bulb. In OARs, the rectum and penile bulb exhibited weak robustness due to their location.

Conclusion:

IMRT plans had a strong sensitivity to setup uncertainty beyond 4 mm, with increasing risk of underdose of tumor and overdose of OARs. Therefore, IMRT plans for localized prostate patients can be considered robust if setup uncertainties kept at or below 4 mm for prostate patients

Keywords: IMRT, Plan robustness, Prostate cancer, setup uncertainty

Accurate prediction: deep learning approach for dose prediction integrating field shape and patient anatomy in breast cancer patients' radiation therapy

Mohammad Ehsan Ravari¹, Marziyeh Behmadi^{1,2}, Shahrokh Nasseri^{3,4}, Mehdi Momennezhad^{4,5}

1. Medical Physics Department, Faculty of Medicine, Semnan University of Medical Sciences, Semnan, Iran
2. Cancer Research Center, Semnan University of Medical Sciences, Semnan, Iran
3. Medical Physics Research Center, Mashhad University of Medical Sciences, Mashhad, Iran
4. Medical Physics Department, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
5. Nuclear Medicine Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

Introduction:

Geometrical information, particularly field shape, plays a pivotal role in accurate dose calculation for radiation therapy. Recent advancements in dose prediction utilizing deep learning focus predominantly on CT images and patient contouring. This study aims developing a deep learning method that incorporates not only CT and contouring images but also leverages field shape for three-dimensional dose prediction in breast cancer radiotherapy.

Method:

In this study, a dataset comprising 150 breast cancer patients treated with the 3D CRT technique was utilized to train and test a proposed deep learning model. The model incorporated CT images, patients' contouring, and field shape as inputs. The network output was the corresponding the patients' dose distribution. Dosimetric parameters extracted from dose volume histograms for planned and predicted distributions were compared. Parameters included Dmean for the planning target volume and organs at risk, as well as D95%, D50%, V47.5Gy for the planning target volume, and V30Gy, V25Gy for the heart, and V20Gy for the left lung.

Results:

The average absolute difference of the Dmean relative to the prescribed dose for the PTV, heart, left lung, right lung and spinal cord were 1.37%, 2.02%, 2.12%, 0.37% and 0.41%, respectively. The 3D gamma pass rate with 3mm/3% criteria for planning target volume, heart, left lung, right lung, spinal cord and body were 89.49%, 91.39%, 92.84%, 98.71%, 99.46% and 96.29% respectively.

Conclusion:

This study presents promising results indicating no significant differences between predicted and planned dose distributions using a novel deep learning model for 3D dose prediction in breast cancer radiotherapy. The model exhibits rapid real-time prediction capabilities, providing accurate results within seconds. Further studies with more patients and on other cancer sites are essential to fully validate the proposed method.

Keywords: deep learning, dose distribution prediction, field shape, breast cancer

Disease control outcomes of stereotactic body radiation therapy or moderate hypo-fractionation for prostate cancer: Real-world experience at two Canadian centers

Mohammad Gouran-savadkoohi¹, Hsin-Pei¹, T.Tsakiridis²

1. McMaster University, Juravinski Cancer Centre

2. McMaster University, Department Of Oncology, JCC

Introduction:

Advantages of using stereotactic body radiation therapy to treat prostate cancer include short treatment times, decreased costs, and limited toxicity. Randomized trial outcomes comparing 5-fraction stereotactic body radiation therapy to conventionally fractionated radiotherapy or hypo-fractionated radiation therapy are pending.

Method:

Patients with low- or intermediate-risk prostate cancer treated with stereotactic body radiation therapy alone (35-40 Gy in 5 fractions) or hypo-fractionated radiation therapy alone (60-62 Gy in 20 fractions) in the period of July 2010 and June 2020. The biochemical relapse-free survival, PSA nadir, interval time to PSA nadir, time to biochemical recurrence (2 ng/ml above PSA nadir) and overall survival were reviewed. Outcomes between treatment groups were compared after propensity-matching by patient baseline characteristics. Kaplan-Meier curves were used to assess biochemical relapse-free survival and overall survival

Results:

We identified 205 and 513 patients with low or intermediate-risk prostate cancer who were treated with stereotactic body radiation therapy or hypo-fractionation, respectively. Intermediate-risk category composed 81% and 95% of the stereotactic body radiation therapy and hypo-fractionated radiation therapy cohorts, respectively. After a median follow up of 58.6 months for the stereotactic body radiation therapy cohort and 45.0 months for the hypo-fractionated cohort, biochemical relapse-free survival and overall survival were not significantly different between treatment groups. The 5-year biochemical relapse-free survival rates were 92.1% and 93.6% and overall survival rates were 96.4% and 95.0% for the stereotactic body radiation therapy and hypo-fractionated cohorts, respectively, after propensity-matching. Stereotactic body radiation therapy resulted in a significantly lower PSA nadir (0.18 ng/ml) compared to hypo-fractionated radiation therapy (0.48 ng/ml) in patients with low-risk prostate cancer. Mean time to biochemical recurrence was not different between treatment groups.

Conclusion:

Stereotactic body radiation therapy is an effective treatment option for low and intermediate-risk prostate cancer with encouraging biochemical relapse-free survival and overall survival rates comparable with hypo-fractionated radiation therapy.

Keywords: PSA nadir; SBRT; biochemical failure; hypofractionated radiotherapy.

Assessment of radiation therapy dose distribution using digitally reconstructed Radiograph

Mohammad Yasin Mohammadi¹, Shahrokh Nasseri², Dr. Hamid Gholamhosseini², Erfan Saatchian¹, Azam Eskandari¹, Dr. Mehdi Momennezhad³

1. Medical Physics Department, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
2. Medical Physics Research Center, Mashhad University of Medical Sciences, Mashhad, Iran
3. Nuclear Medicine Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

Introduction:

The DRR has typically been employed for verifying the geometry in radiotherapy treatment, and there have been no documented instances of its use for dosimetric purposes. This research aims to introduce a new methodology, allowing us to generate a two-dimensional dose distribution within a treatment plan using the DRR for the first time.

Method:

First, the study will investigate the relationship between the pixel values of the DRR and water-equivalent thickness (WET). Next, it aims to establish a link between depth and absorbed dose. By combining these relationships, a new equation will be developed to connect the pixel values of the DRR to the absorbed dose. This method will be utilized to calculate the dose distribution in the isocentric plane for both homogeneous and heterogeneous phantoms. To verify the accuracy of this approach, the results will be compared with the two-dimensional dose distribution from the treatment planning system (TPS).

Results:

At the isocenter, the point dose comparison indicates a variance of around 1% for the homogeneous phantom and 1.2% for the heterogeneous phantom. A gamma analysis (3%-3mm criteria) was conducted to compare the region-based dose distribution. The pass rate achieved was 98.44% for the homogeneous phantom and 96.6% for the heterogeneous phantom.

Conclusion:

Confirming the dose distribution derived from this method with TPS introduces a novel use of DRR for assessing dose distribution in perpendicular planes to the treatment field's central axis. This serves as a means for verifying treatment planning and a fresh approach to quality control in radiotherapy.

Keywords: Radiotherapy, Digitally Reconstructed Radiograph, Dosimetry verification, Water Equivalent Thickness

Exploration of the Strategies of Iranian Nurses in Providing Palliative Care to Children with Cancer: A Qualitative

Zahra Ebadinejad¹, Maryam Rassouli², Ali Fakhr Movahedi^{3,4}

1. Department of Nursing, Qaen Faculty of Medical Sciences, Birjand University of Medical Sciences, Birjand, Iran.
2. Cancer Research Centre, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
3. Nursing Research Care Center, Semnan University of Medical Sciences, Semnan, Iran.
4. Department of Pediatric and Neonatal Nursing, School of Nursing, Semnan University of Medical Sciences, Semnan, Iran.

Corresponding Author: Ali Fakhr Movahedi

E-mail: alimovi49@semums.ac.ir

Introduction:

Due to the prevalence of cancer in children and the decrease in their quality of life, attention to palliative care has become one of the main concerns of the Iranian health system. Given that nurses are the key members of pediatric palliative care, explaining their strategies can help to identify existing limitations in addition to recognizing ongoing care. So this study aimed to explain the strategies of Iranian nurses in providing palliative care to children with cancer.

Method:

This study is a qualitative research with an approach to the conventional content analysis. The main participants were nine nurses working in ward pediatric oncology. Also based on data analysis, five parents of children, two children, one social worker, one physician, one psychologist, and one nutritionist were also included. Data were collected through semi-structured interviews and observation and were analyzed by the Elo and Kyngäs approach. Lincoln and Guba criteria were used for the trustworthiness of data analysis.

Results:

Three conceptual categories were developed with qualitative analysis: "prevention and relief of pain and physical symptoms", "spontaneous compassion", and "strengthen parental resilience"; that were derived from the main categories: "attention to precautionary considerations," "friendly relationship of nurses with parents of children, create enjoyable moments, spontaneous assistance," "facilitate coping with current situation, perceived confrontation with child death.

Conclusion:

In this study, the results showed that nurses' strategies in providing palliative care to children with cancer were a combination of professional and spontaneous strategies.

Keywords: Children with cancer, Iran, nurses' strategies, palliative care, qualitative study

Palliative care versus supportive care in cancer: Two alternative or complementary approaches?

Pooneh Pirjani¹, Shayesteh Kokabi Hamidpour¹, Babak Arjmand^{2,1}

1. Iranian Cancer Control Center (MACSA), Tehran, Iran
2. Cell Therapy and Regenerative Medicine Research Center, Endocrinology and Metabolism Molecular-Cellular Sciences Institute, Tehran University of Medical Sciences, Tehran, Iran

Background:

The concept of palliative care is interpreted with different meanings in societies and references. In other words, in some cases, palliative care is associated with end-of-life and lack of response to treatments, and dying. Hence, it can create a negative impression on the patients, families, and even the health care providers. In fact, palliative care was traditionally provided to the patients that are in advanced or incurable stages. However, it is stated that palliative care should be provided at every stage of illness trajectory along with receiving medical services and treatments. While in recent interpretations, it has been attempted to change the negative connotation of palliative care, it still remains challenging.

Objective:

This study was conducted with the aim of investigating and describing a comprehensive term with a positive impression in the field of supportive/palliative care.

Methods:

Key databases were searched and the relevant medical literature were reviewed.

Results:

In this regard, it has been preferred to change the previous prospective into more positive views in some societies. To this end, the term of “supportive care” is highlighted more than before. Indeed, supportive care is known as a comprehensive term that provided from pre-diagnosis to bereavement. Over the past years, by gaining a comprehensive understanding of supportive care as well as palliative care roles in the process of managing conditions facing by patients and their families, the two terms can be evolved and even intertwined, so that it can be considered “Supportive and palliative care”. In this context, supportive and palliative care referred to specialized interdisciplinary cares that aims to improve the quality of life of patients and their families dealing with the issues associated with severe, progressive, and life threatening/limiting conditions, which includes the management of physical, psychosocial, emotional, and spiritual needs of both patients and their families.

Conclusion:

Therefore, it can be concluded that in the current framework, supportive and palliative care provides to the patients from pre-diagnosis, through treatment, to post-treatment stages, rather than the use of supportive care or palliative care independently.

Key words: Cancer, End-of-life, Oncology, Palliative care, Supportive care.

Development and psychometric properties of Health-Promoting Lifestyle Scale in Colorectal Cancer Survivors (HPLS-CRCS): a mixed-method study

Elahe Ramezanzade Tabriz¹, Monir Ramezani², Abbas Heydari², Seyed Amir Aledavood³, Jamshid Jamali⁴

1. Assistant Professor, Department of Medical-Surgical Nursing, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran
2. Nursing and Midwifery Care Research Center, Mashhad University of Medical Sciences, Mashhad, Iran
3. Cancer Research Center, Mashhad University of Medical Sciences, Mashhad, Iran
4. Social Determinants of Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

Introduction:

Detecting a health-promoting lifestyle in colorectal cancer (CRC) survivors is of paramount importance to manage disease complications, prevent their recurrence, and enhance survival; however, no specialized tool has yet been provided to measure the lifestyle of these patients. Accordingly, this study aimed to develop and determine the psychometric properties of the Health-Promoting Lifestyle Scale in CRC Survivors (HPLS-CRCS).

Material & Methods:

This study was a mixed study with an exploratory sequential design in two phases. Concept analysis was performed in the first phase according to Schwartz-Barcott and Kim's (2000) hybrid model to explain the concept, identify dimensions, and generate items. In the second phase, psychometrics including validity (face, content, and construct) and reliability (internal consistency and stability) were determined. Responsiveness, interpretability, ease of use, item weighting, and scale scoring were also determined.

Results:

After explaining the concept, an initial scale encompassing 211 items was developed, content and item analyses were conducted, and the items decreased to 89 items after the face validity assessment. For construct validity, confirmatory factor analysis (CFA) was conducted with a sample size of 500 survivors, and convergent validity was performed for the Persian version of the Health-Promoting Lifestyle Profile II (HPLP-II). Accordingly, 80 items were classified into six factors: activity and rest, spiritual growth, health responsibility, nutrition, interpersonal relationships, and psychological management, with RMSEA = 0.055, $\chi^2/df = 2.484$, and $\chi^2 = 6816.516$. The reliability of the scale was confirmed, Cronbach's alpha was between 0.865 and 0.928, and the intraclass correlation coefficient (ICC), the standard error of measurement (SEM), the minimal important change (MIC), and the smallest detectable change (SDC) were 0.896, 3.36, 13.86, and 19.87, respectively.

Conclusion:

The HPLS-CRCS consists of 80 items in six dimensions and is a valid and reliable scale for evaluating the health-promoting lifestyle in CRC survivors. Using this scale to evaluate the healthy lifestyle of these survivors can lead healthcare providers to detect deficiencies and plan the lifestyle of CRC survivors during the post-treatment period.

Keywords: Lifestyle, Health promotion, Colorectal cancer, Survivors, Scale, Psychometrics

Good Death from the perspective of family-members of cancer patients in Iran

Salman Barasteh^{1,2}, Hossein Mohammadi Roshan³

1. Health Management Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran

2. Nursing Faculty, Baqiyatallah University of Medical Sciences, Tehran, Iran

3. Student Research Committee, Baqiyatallah University of Medical Sciences, Tehran, Iran

* Corresponding Author: Salman Barasteh

Achieving good death and enhancement of end-of-life care are among the objectives of palliative care in patients with cancer. There should be an instrument for evaluating the quality of palliative care provided by family members to provide comprehensive care at the end of life. This study was done for translation and assessment the psychometric properties of good death inventory- short form according to the perspective of family of patients with cancer in Tehran. Overall, 204 family members of patients with cancer were included. In the exploratory factor analysis, three factors of peace, hope, and value as well as quality of care were extracted with cumulative variance of 41.8%. We found a significant and suitable correlation between the total scores of the participants Good death inventory-short form and care evaluation scale2.0 ($r = 0.459$, $P < 0.001$). Also, there was a positive and significant correlation between the GDI short form total score and general satisfaction with end-of-life care ($r=0.423$, $p<0.001$) as well as the patient's general quality of life at terminal stages ($r=0.539$, $p<0.001$). The Cronbach's alpha coefficient for the questionnaire was found 0.842, and the stability was confirmed with ICC=0.851. The Persian version of GDI-short form is a valid and reliable questionnaire which can investigate the factors associated with good death according to patients' family members' perspective. Thus, this instrument can be used in clinical evaluation as well as research purposes and for family members in Iranian population.

Keywords: Palliative Care, End-Of-Life Care, Questionnaires, Good Death, Cancer, Validation, quality of dying and death, hospice

A case of Lymphoma with a Large Chest Wound

Mahvash Agahi

Head Nurse of the Medical Oncology Department at Shariati Hospital

Introduction:

This case report presents a clinical case of lymphoma with a large ulcer in the chest. The diagnosis was confirmed through biopsy and pathology, revealing High Grade B cell Lymphoma.

Methods:

Descriptive methods were used to document the clinical manifestations of the patient upon arrival. These included a very large wound on the chest wall, severe edema of the hands, increased creatinine levels during hospitalization, pleural effusion in chest radiograph, and pulmonary involvement in lung CT. The patient underwent chemotherapy, and after one week, was discharged with a good general condition and reduced wound size.

Results:

Following chemotherapy, the patient showed significant improvement in the general condition and a reduction in the size of the wound.

Conclusion:

This case highlights the importance of scientific and professional nursing care in achieving effective results in the management of lymphoma wounds.

Keywords: lymphoma, wound, nursing care

روزاول: چهارشنبه ۴ بهمن ۱۴۰۲ - سالن اصلی برنامه کلینیکال انکولوژی

| عنوان | زمان |
|---|--|
| موضوعات عمومی در انکولوژی | |
| هیئت رئیسه: | <ul style="list-style-type: none">دکتر محمدرضا قوام نصیری (رادیوانکولوژیست)دکتر عبدالله فضلعلی زاده (رادیوانکولوژیست)دکتر علیرضا نیکوفر (رادیوانکولوژیست)دکتر حسین مدنی (رادیوانکولوژیست) |
| هفتمین R در رادیوبیولوژی | ۸:۳۰ - ۸:۱۵ |
| پنل اخلاق در انکولوژی | ۹:۴۵ - ۸:۳۵ |
| مسئول پنل: | |
| دکتر فرهاد سمیعی (رادیوانکولوژیست) | |
| اعضای پنل: | |
| دکتر خسرو مجیر شیبانی (رادیوانکولوژیست) | |
| دکتر فاضل الهی (هماتوانکولوژیست) | |
| دکتر پوریا عادل (رادیوانکولوژیست) | |
| دکتر علی کاظمیان (رادیوانکولوژیست) | |
| دکتر محمدرضا خرمند (معاون انتظامی سازمان نظام پزشکی کشور) | |
| افتتاحیه | ۱۰:۲۰ - ۹:۵۰ |
| استراحت | ۱۰:۵۵ - ۱۰:۲۰ |
| استرئوتاکتیک رادیوتراپی | |
| جلسه مشترک با انجمن اروپایی رادیوتراپی و انکولوژی (ESTRO) | ۱۱:۰۰ - ۱۳:۰۰ |
| گرداننده: | |
| دکتر فرشید اربابی (رادیوانکولوژیست) | |
| دکتر فرناز آموزگار هاشمی (رادیوانکولوژیست) | |
| SBRT در تومورهای حجیم و ترکیب آن با ایمونوتراپی | ۱۱:۴۵ - ۱۱:۰۰ |
| Dr. Pedro C. Lara (Radiation Oncologist) | |
| Q&A | ۱۲:۰۰ - ۱۱:۴۵ |
| SBRT قدم به قدم مهره | ۱۲:۴۵ - ۱۲:۰۰ |
| Dr. Filippo Alongi (Radiation Oncologist) | |
| Q&A | ۱۳:۰۰ - ۱۲:۴۵ |
| هیئت رئیسه: | <ul style="list-style-type: none">دکتر کاظم انوری (رادیوانکولوژیست)دکتر محمد هوشیاری (رادیوانکولوژیست) |
| رادیوسرجری به روش گامانایف در تومورهای اولیه و ثانویه مغزی | ۱۳:۲۵ - ۱۳:۰۵ |
| دکتر احسان سربای (رادیوانکولوژیست) | |
| نماز و ناهار | ۱۴:۳۰ - ۱۳:۳۰ |
| سرطان‌های دستگاه گوارش | |
| مناظره: کمورادیوتراپی نئوآدجوانت در مقابل کمورادیوتراپی قطعی در آدنوکارسینوم GEJ و کاردیا | ۱۵:۱۰ - ۱۴:۳۰ |
| گرداننده: | |
| دکتر محمد بابایی (رادیوانکولوژیست) | |
| اعضای پنل: | |
| دکتر نیما موسوی (رادیوانکولوژیست) | |
| دکتر رضا قلعه تکی (رادیوانکولوژیست) | |
| پنل مدیریت درمان چند رشته‌ای کانسر رکتوم | ۱۶:۳۰ - ۱۵:۱۵ |
| مسئول پنل: | |
| دکتر ساسان رزمجو (رادیوانکولوژیست) | |
| اعضای پنل: | |
| دکتر حجت‌اله شهبازیان (رادیوانکولوژیست) | |
| دکتر پری قدمگاهی (رادیوانکولوژیست) | |
| دکتر رضا ملایری (هماتوانکولوژیست) | |
| دکتر عبدالحسین طلایی‌زاده (جراح سرطان) | |
| دکتر فرامرز بهشتی‌فر (جراح سرطان) | |
| دکتر فایزه سلحشور (رادیولوژیست) | |
| دکتر آرمین شهریاری (فوق تخصص گوارش) | |

روزاول: چهارشنبه ۴ بهمن ۱۴۰۲ - سالن هگمتانه برنامه کلینیکال انکولوژی

| | |
|---|---------------|
| کارگاه ارزیابی پلن رادیوتراپی (پستان، پروستات، رکتوم، گلیوما) | ۱۸:۳۰ - ۱۶:۳۰ |
| گرداننده: | |
| دکتر علی تقی‌زاده (رادیوانکولوژیست) | |
| دکتر امیر انواری (رادیوانکولوژیست) | |
| اعضا: | |
| دکتر کاظم انوری (رادیوانکولوژیست) | |
| دکتر مونا ملک‌زاده (رادیوانکولوژیست) | |
| دکتر زهرا نادری (رادیوانکولوژیست) | |
| دکتر معصومه نجفی (رادیوانکولوژیست) | |
| دکتر علی یعقوبی جویباری (رادیوانکولوژیست) | |
| دکتر سارا فراهانی (رادیوانکولوژیست) | |
| دکتر پگاه ساسان‌پور (رادیوانکولوژیست) | |

روز دوم: پنجشنبه ۵ بهمن ۱۴۰۲ - سالن اصلی برنامه کلینیکال انکولوژی

| عنوان | زمان |
|--|---------------|
| سرطان‌های دستگاه ادراری تناسلی | |
| هیئت رئیسه: ▪ دکتر علیرضا عموحیدری (رادیوانکولوژیست) ▪ دکتر هادی مولانا (رادیوانکولوژیست) | |
| SBRT سرطان پروستات | ۸:۱۵ - ۸:۵۰ |
| ▪ Dr. Cem Onal (Radiation Oncologist) | |
| Q&A | ۸:۵۰ - ۹:۰۰ |
| پنل مدیریت درمان چندرشته‌ای کانسر پروستات الیگومتاستاتیک مسئول پنل: ▪ دکتر فرشید فرهان (رادیوانکولوژیست) اعضای پنل: ▪ دکتر بهرام مفید (رادیوانکولوژیست) ▪ دکتر عارفه سعیدیان (رادیوانکولوژیست) ▪ دکتر عرفان امینی (اوروانکولوژیست) ▪ دکتر محسن سرکاریان (اوروانکولوژیست) ▪ دکتر سعید فرزانه (متخصص پزشکی هسته‌ای) | ۹:۰۵ - ۱۰:۲۰ |
| استراحت | ۱۰:۲۵ - ۱۰:۵۵ |
| سرطان پستان | |
| جلسه مشترک با انجمن اروپایی مدیکال انکولوژی (ESMO) گرداننده: ▪ دکتر پدرام فدوی (رادیوانکولوژیست) ▪ دکتر مستانه صانعی (رادیوانکولوژیست) | ۱۱:۰۰ - ۱۲:۱۰ |
| نقش Antibody Drug Conjugate ها در سرطان پستان ▪ Dr. Giuseppe Curigliano (Medical Oncologist) | ۱۱:۰۰ - ۱۱:۳۰ |
| Q&A | ۱۱:۳۰ - ۱۱:۳۵ |
| تازه‌های درمان سرطان پستان Her2 مثبت ▪ Dr. Rupert Bartsch (Medical Oncologist) | ۱۱:۳۵ - ۱۲:۰۵ |
| Q&A | ۱۲:۰۵ - ۱۲:۱۰ |
| پنل مدیریت درمان چندرشته‌ای سرطان پستان هورمون مثبت و HER2 مثبت مسئول پنل: ▪ دکتر رهام سالک (رادیوانکولوژیست) اعضای پنل: ▪ دکتر فاطمه همایی (رادیوانکولوژیست) ▪ دکتر حمید رضا میرزایی (رادیوانکولوژیست) ▪ دکتر ساره حسینی (رادیوانکولوژیست) ▪ دکتر ابوالقاسم الهیاری (هماتوانکولوژیست) ▪ دکتر حوریه سلیمانی بامی (رادیولوژیست) | ۱۲:۱۵ - ۱۳:۳۰ |
| نماز و ناهار | ۱۳:۳۰ - ۱۴:۳۰ |
| سرطان‌های سروگردن | |
| هیئت رئیسه: ▪ دکتر پیام ایزدپناهی (رادیوانکولوژیست) | |
| ▪ Dr. Ugur Selek (President of Turkish Society of Raditaion Oncology) ▪ دکتر مرتضی طباطبائی‌فر (رادیوانکولوژیست) | |
| رادیوتراپی مجدد در سرطان‌های سرو گردن ▪ Dr. Mustafa Cengiz (Radiation Oncologist) | ۱۴:۳۰ - ۱۴:۵۵ |
| Q&A | ۱۴:۵۵ - ۱۵:۰۰ |
| پنل مدیریت درمان چند رشته‌ای عود کانسر زبان مسئول پنل: ▪ دکتر احمد عامری (رادیوانکولوژیست) اعضای پنل: ▪ دکتر حسن حامدی (رادیوانکولوژیست) ▪ دکتر علی عمادی طرقيه (رادیوانکولوژیست) ▪ دکتر هاشم شریفیان (رادیولوژیست) ▪ دکتر مازیار مطیعی (متخصص گوش و حلق و بینی) ▪ دکتر ابراهیم کریمی (متخصص گوش و حلق و بینی) | ۱۵:۰۰ - ۱۶:۱۵ |
| کارگاه ESTRO برای کانتورینگ سرطان‌های سر و گردن گرداننده: ▪ دکتر مهدی عقیلی (رادیوانکولوژیست) ▪ دکتر سمیرا ازقندی (رادیوانکولوژیست) ESTRO experts | ۱۶:۳۰ - ۱۸:۳۰ |
| ▪ Dr. Vincent Gregoire (Radiation Oncologist) ▪ Dr. Jesper Eriksen (Clinical Oncologist) | |
| مجمع عمومی سالانه | ۱۸:۳۰ - ۲۰:۰۰ |

روز سوم: جمعه ۶ بهمن ۱۴۰۲ - سالن اصلی برنامه کلینیکال انکولوژی

| عنوان | زمان |
|---|---------------|
| سرطان‌های زنان | |
| هیئت رئیسه: ▪ دکتر علیرضا ناصری (رادیوانکولوژیست) ▪ دکتر رضا خدابخشی (رادیوانکولوژیست) | |
| براکي تراپی بر پایهٔ ام آرآی در سرطان‌های زنان ▪ دکتر علی باقری (رادیوانکولوژیست) | ۸:۱۵ - ۸:۳۵ |
| پنل مدیریت درمان چند رشته‌ای عود کانسر دهانهٔ رحم مسئول پنل: ▪ دکتر احمد مصلايي (رادیوانکولوژیست) اعضای پنل: ▪ دکتر منصور انصاری (رادیوانکولوژیست) ▪ دکتر نزهت خانجانی (رادیوانکولوژیست) ▪ دکتر مژگان اکبرزاده جهرمی (پاتولوژیست) ▪ دکتر زهرا شیروانی (فلوشیپ انکولوژی زنان) ▪ دکتر سمانه بهرامی (فلوشیپ انکولوژی زنان) | ۸:۴۰ - ۹:۵۵ |
| استراحت | ۱۰:۳۰ - ۱۰:۵۰ |
| موضوعات عمومی در انکولوژی | |
| گرداننده: ▪ دکتر احمد مافی (رادیوانکولوژیست) ▪ دکتر علی مطلق (رادیوانکولوژیست) | |
| تجربهٔ اتریش در درمان با ذرات سنگین ▪ Dr. Piero Fossati (Radiation Oncologist) | ۱۰:۵۵ - ۱۱:۳۰ |
| Q&A | ۱۱:۰۰ - ۱۱:۵۵ |
| تجربهٔ هند در درمان با ذرات سنگین ▪ Dr. Rakesh Jalali (Radiation Oncologist) | ۱۱:۳۰ - ۱۱:۵۵ |
| Q&A | ۱۱:۳۵ - ۱۱:۴۰ |
| هیئت رئیسه: ▪ دکتر مینا تجویدی (رادیوانکولوژیست) ▪ دکتر شعله آروندی (رادیوانکولوژیست) | |
| ملاحظات عمومی و چالش‌های رادیوتراپی کودکان ▪ دکتر میترا قالیبافیان (رادیوانکولوژیست) | ۱۱:۴۰ - ۱۲:۰۵ |
| هیئت رئیسه: ▪ دکتر امیرمحمد عارف‌پور (رادیوانکولوژیست) ▪ دکتر سیدامیر آل داود (رادیوانکولوژیست) ▪ دکتر حسین فودازی (رادیوانکولوژیست) | |
| بیماری الیگومتاستاتیک و رادیوتراپی شخصی‌سازی‌شده در سال ۲۰۲۴: شرایط کنونی و چشم‌انداز آینده ▪ Dr. Matthias Guckenberger (Radiation Oncologist) | ۱۲:۱۰ - ۱۲:۵۰ |
| Q&A | ۱۲:۵۰ - ۱۳:۰۰ |
| اختتامیه | ۱۳:۰۰ - ۱۳:۳۰ |
| نماز و ناهار | ۱۳:۳۰ - ۱۴:۳۰ |

روزاول: چهارشنبه ۴ بهمن ۱۴۰۲ - سالن توسکا برنامه پرستاری

| عنوان | زمان |
|---|---------------|
| افتتاحیه | ۸:۱۵ - ۸:۳۰ |
| معرفی اهداف کنگره در بخش پرستاری ■ دکتر سلمان برسته (رئیس کارگروه پرستاری انکولوژی، استادیار پرستاری) | ۸:۳۰ - ۸:۴۰ |
| معرفی پنل های کنگره ■ دکتر مریم کرمی (دکتری پرستاری) | ۸:۴۰ - ۸:۴۵ |
| پنل مراقبت پرستاری شیمی درمانی مسئول پنل: ■ دکتر مریم کتانباغ (پزشک عمومی) اعضای پنل: ■ علیرضا فرید خمامی (مدرس شیمی درمانی) ■ اسماعیل رضایی (مدرس شیمی درمانی) ■ دکتر مریم کرمی (دکتری پرستاری) | ۸:۴۵ - ۱۰:۰۰ |
| ارایه مقالات پذیرفته شده ■ مبینا گل محمدی (کارشناسی ارشد پرستاری) ■ دکتر الهه رمضان زاده تبریز (استادیار پرستاری) ■ دکتر پونه پیرجانی (پزشک عمومی) | ۱۰:۰۰ - ۱۰:۳۰ |
| پذیرایی | ۱۰:۳۰ - ۱۱:۰۰ |
| پنل مدیریت لنفادم در بیماران مبتلا به سرطان مسئول پنل: ■ لیلا انگوتی (کارشناسی ارشد کاردرمانی) اعضای پنل: ■ دکتر پونه پیرجانی (پزشک عمومی) | ۱۱:۰۰ - ۱۳:۰۰ |
| نماز و ناهار | ۱۳:۰۰ - ۱۴:۰۰ |
| پنل مراقبت تسکینی مسئول پنل: ■ دکتر مریم رسولی (استاد پرستاری) اعضای پنل: ■ دکتر لیلی خانعلی مجن (استادیار پرستاری) ■ دکتر اعظم شیرین آبادی فراهانی (استادیار پرستاری) ■ دکتر سمیرا بیرانوند (استادیار پرستاری) ■ دکتر حدیث اشرفی زاده (استادیار پرستاری) ■ دکتر سلمان برسته (استادیار پرستاری) ■ دکتر اعظم اسحاقیان (دکتری پرستاری) | ۱۴:۰۰ - ۱۵:۳۰ |
| ارایه مقالات پذیرفته شده ■ دکتر زهرا عبادی نژاد (استادیار پرستاری) ■ دکتر حسین جباری بیرامی (استاد مدیریت خدمات بهداشتی) | ۱۵:۳۰ - ۱۶:۰۰ |

روز دوم: پنجشنبه ۵ بهمن ۱۴۰۲ - سالن توسکا برنامه پرستاری

| عنوان | زمان |
|--|---------------|
| ارائه گزارشی از مباحث روز گذشته و برنامه‌های پیش‌رو ▪ دکتر مریم کرمی (دکتری پرستاری) | ۸:۳۰ - ۸:۱۵ |
| پنل زخم‌های پس از رادیوتراپی مسئول پنل: ▪ مهدی اکبرزاده امیردهی (کارشناسی ارشد پرستاری) اعضای پنل: ▪ سعید پاسبان نوقابی (کارشناسی ارشد پرستاری) ▪ علیرضا عباسی نیاسر (کارشناس پرستاری) ▪ سید امیر حسین تقوی سنگدهی (کارشناس پرستاری) | ۱۰:۳۰ - ۸:۳۰ |
| ارایه مقالات پذیرفته شده ▪ حامد سوادکوهی (کارشناسی ارشد پرستاری) ▪ مهوش آگاهی (کارشناس پرستاری) | ۱۰:۳۰ - ۱۰:۰۰ |
| پذیرایی | ۱۱:۳۰ - ۱۰:۳۰ |
| پنل درد در بیماران مبتلا به سرطان مسئول پنل: ▪ دکتر لادن صدیقی (استادیار پرستاری) اعضای پنل: ▪ دکتر ندا ثنائی (استادیار پرستاری) ▪ دکتر فاطمه بهرام‌نژاد (دانشیار پرستاری) ▪ دکتر سید قاسم موسوی (استادیار پرستاری) | ۱۳:۰۰ - ۱۱:۰۰ |
| نماز و نماهار | ۱۴:۰۰ - ۱۳:۰۰ |
| پنل مراقبت‌های پرستاری در رادیوتراپی مسئول پنل: ▪ دکتر مریم کرمی (دکتری پرستاری) اعضای پنل: ▪ فاطمه خادمی (کارشناسی ارشد پرستاری) ▪ امین نوری (کارشناسی ارشد پرستاری) | ۱۵:۳۰ - ۱۴:۰۰ |
| ارایه مقالات پذیرفته شده ▪ دکتر مریم الهی‌خواه (پزشک عمومی) ▪ دکتر پرند پور آذرحق (پزشک عمومی) | ۱۶:۰۰ - ۱۵:۳۰ |

روز اول: چهارشنبه ۴ بهمن ۱۴۰۲ - سالن مولوی برنامه رادیوبیولوژی بالینی

| عنوان | زمان |
|--|---------------|
| <ul style="list-style-type: none"> دکتر بیژن هاشمی ملایری دکتر سید ربیع مهدوی | هیئت رئیسه: |
| تلاوت قرآن کریم و خوشامد گویی | ۸:۳۰ - ۸:۴۵ |
| رادیوبیولوژی از آزمایشگاه تا پرتودرمانی <ul style="list-style-type: none"> دکتر حسین مزارانی | ۸:۴۵ - ۹:۱۵ |
| رادیوبیولوژی پرتودرمانی از NSD به BED Prof. Arun Chougule | ۹:۱۵ - ۹:۴۵ |
| افتتاحیه | ۹:۵۰ - ۱۰:۲۰ |
| پذیرایی | ۱۰:۲۰ - ۱۰:۵۵ |
| پنل نقش رادیوبیولوژی در پرتودرمانی هدفمند و دقیق هیئت رئیسه: <ul style="list-style-type: none"> دکتر حسین مزارانی دکتر محمد امین مصلح شیرازی دکتر علی قنبری مطلق دکتر فرهاد سمیعی | |
| کاربرد رادیومیک و رادیوژنومیک با هوش مصنوعی در حوزه آنکولوژی Prof. Hidetaka Arimura | ۱۱:۰۰ - ۱۱:۳۰ |
| رادیوبیولوژی پرتودرمانی هدفمند Prof. Annette Haworth | ۱۱:۳۰ - ۱۲:۰۰ |
| درمان همزمان پرتودرمانی LDR و هایپرترمی Prof. Ishmael Parsai | ۱۲:۰۰ - ۱۲:۳۰ |
| رادیوتراپی مداخله ای (براکی تراپی): یک راه حل مناسب برای تابش مجدد در تومورهای عودکننده نزدیک به اندامهای حساس در معرض خطر دکتر رامین جابری | ۱۲:۳۰ - ۱۳:۰۰ |
| رادیوبیولوژی در براکی تراپی Dr. Mary Joan | ۱۳:۰۰ - ۱۳:۳۰ |
| نماز و ناهار | ۱۳:۳۰ - ۱۴:۳۰ |

روز دوم: پنجشنبه ۵ بهمن ۱۴۰۲ - سالن مولوی

برنامه رادیوبیولوژی بالینی

| عنوان | زمان |
|--|---------------|
| پنل مباحث عمومی رادیوبیولوژی بالینی هیئت رئیسه: | |
| <ul style="list-style-type: none"> دکتر علی شبستانی منفرد دکتر رضا صادقی دکتر محسن بخشنده دکتر فاطمه پاک نیت | |
| مفاهیم رادیوبیولوژیکی رادیوتراپی استرئوتاکتیک پلی و الیگومتاستاز . دکتر سارا سمیعی | ۸:۳۰ - ۸:۵۰ |
| تاثیر نقاط با دز بالا و پایین در پلن درمانی رادیوتراپی بر نتیجه درمان . دکتر علی شبستانی منفرد | ۸:۵۰ - ۹:۱۰ |
| وضعیت فعلی روش BNCT در درمان بدخیمی ها و چالش های آن در ایران . دکتر سید ابوالقاسم حائری | ۹:۱۰ - ۹:۳۰ |
| هوش مصنوعی و مدل سازی رادیوبیولوژیکی . دکتر حمید عبداللهی | ۹:۳۰ - ۹:۵۰ |
| سرطان های ثانویه ناشی از رادیوتراپی . دکتر محمد محمدی | ۹:۵۰ - ۱۰:۲۰ |
| پذیرایی | ۱۰:۲۰ - ۱۰:۵۵ |
| پنل حساس کننده ها و محافظ های پرتوی هیئت رئیسه: | |
| <ul style="list-style-type: none"> دکتر سمیده خوئی دکتر اصغر مازیار دکتر ابوالحسن رضائیان دکتر محمد اکبرنژاد | |
| کاربرد حساس کننده های در اندازه نانو در درمان سرطان . دکتر سمیده خوئی | ۱۱:۰۰ - ۱۱:۲۰ |
| Mirafos: یک داروی جدید با اثر دوگانه حساس کنندگی تومور و محافظت بافت سالم . دکتر حسین مزدارانی | ۱۱:۲۰ - ۱۱:۳۵ |
| بررسی اثرات حساسیت پرتوی نانوذرات گرافن کوانتوم دات . دکتر فرشته کوشا | ۱۱:۳۵ - ۱۱:۵۰ |
| بررسی اثر نانوذرات اکسید آهن با پوشش گالدونیوم و طلا در MRI و پرتودرمانی هدفمند سلول های سرطان پستان در شرایط آزمایشگاهی . دکتر آزاده امرائی | ۱۱:۵۰ - ۱۲:۰۵ |
| مدل های عوارض بافت نرمال در رادیوبیولوژی . دکتر سوسن چراغی | ۱۲:۰۵ - ۱۲:۲۰ |
| افزایش اثر پرتودرمانی سلول های سرطانی با هسته مغناطیسی و نانوذرات با پوسته Cus . دکتر ثریا مینایی | ۱۲:۲۰ - ۱۲:۳۵ |
| بررسی مجدد مکانیسم های بالقوه در مرگ سلولی ناشی از رادیوتراپی و ارتباط آن با اثرات غیرهدف پرتو . دکتر فاطمه پاک نیت | ۱۲:۳۵ - ۱۲:۵۰ |
| رادیوبیولوژی مغز و تصویربرداری تومورهای مغزی . دکتر ابوالحسن رضائیان | ۱۲:۵۰ - ۱۳:۰۵ |
| حساسیت پرتوی ذاتی: پیشرفتی حیاتی به رادیوتراپی شخصی . دکتر حسین عظیمیان | ۱۳:۰۵ - ۱۳:۲۰ |
| نماز و ناهار | ۱۳:۳۰ - ۱۴:۳۰ |

روز سوم: جمعه ۶ بهمن ۱۴۰۲ - سالن مولوی
برنامه رادیوبیولوژی بالینی

| عنوان | زمان |
|--|---------------|
| پنل مناظره: نقش رادیوبیولوژی در پرتودرمانی دقیق | ۸:۳۰ - ۱۰:۰۰ |
| پذیرایی | ۱۰:۳۰ - ۱۰:۰۰ |
| ۲۰ سال تجربه انتشار فصلنامه علمی بین‌المللی پرتوپژوه (IJRR) ▪ دکتر حسین مزارانی (سر دبیر) | ۱۰:۳۰ - ۱۱:۰۰ |
| پنل مناظره: آینده رادیوبیولوژی در ایران | ۱۱:۰۰ - ۱۳:۰۰ |
| اختتامیه | ۱۳:۰۰ - ۱۳:۳۰ |
| نماز و ناهار | ۱۳:۳۰ - ۱۴:۳۰ |

روز اول: چهارشنبه ۴ بهمن ۱۴۰۲ - سالن هگمتانه برنامه فیزیک پزشکی

| عنوان | زمان |
|--|---------------|
| تلاوت قرآن کریم و خوشامدگویی | ۸:۳۰ - ۸:۴۵ |
| پنل طراحی درمان و مدلسازی I مسئول پنل: دکتر محمدامین مصلح شیرازی اعضای پنل: دکتر غزاله گرایلی . دکتر محسن بخشنده دکتر محمدجواد طهماسبی بیرگانی | ۸:۴۵ - ۱۰:۳۰ |
| نقش فیزیک پزشکان در عرصه جدید رادیوتراپی در ایران دکتر محمدامین مصلح شیرازی | ۹:۰۵ - ۹:۴۵ |
| رادیوسرجری تقطیعی با گاما نایف . دکتر غزاله گرایلی | ۹:۳۵ - ۹:۵۰ |
| پرتودرمانی تطبیقی On-Line، تبادل دو سال تجربه در NCCCR دکتر آرام رستمی | ۹:۳۵ - ۱۰:۰۵ |
| سیستم مدیریت حرکت در رادیوتراپی . دکتر محسن بخشنده | ۱۰:۰۵ - ۱۰:۳۰ |
| استراحت | |
| پنل طراحی درمان و مدلسازی II مسئول پنل: دکتر سیدربیع مهدوی اعضای پنل: دکتر علی شبستانی منفرد . دکتر حسن علی ندایی . دکتر ناهید چگنی | ۱۱:۰۰ - ۱۳:۳۰ |
| مزیت استفاده از گاما نایف برای تومورهای خوش خیم مغز در مقایسه با IMRT و VMAT: چشم انداز رادیوبیولوژیکی دکتر حسن علی ندایی | ۱۱:۰۰ - ۱۱:۳۰ |
| پرتودرمانی حین جراحی: گذشته، حال و آینده دکتر علی شبستانی منفرد | ۱۱:۳۰ - ۱۲:۰۰ |
| نقش رادیومیکس در پرتودرمانی دکتر سیدربیع مهدوی | ۱۲:۰۰ - ۱۲:۳۰ |
| چالش‌های مربوط به آلودگی نوترونی در پرتودرمانی با استفاده از گرید دکتر ناهید چگنی | ۱۲:۳۰ - ۱۳:۰۰ |
| تاثیر دزیمتریک چرخش کولیماتور بر درمان VMAT و IMRT برای بیماران مبتلا به سرطان رکتوم . دکتر امین بنایی | ۱۳:۰۰ - ۱۳:۱۵ |
| کیفیت پرتو و راز پشت درصد دوز عمقی کمتر در گریدتراپی آقای امیرحسین کریمی | ۱۳:۱۵ - ۱۳:۳۰ |
| نماز و ناهار | |
| پنل براکی تراپی مسئول پنل: دکتر رامین جابری اعضای پنل: دکتر مهدی قربانی . دکتر فاطمه محمدیان خانم بهجت حقیقیان . آقای جواد قاسمی | ۱۴:۳۰ - ۱۶:۳۰ |
| حفظ عملکرد ارگان در براکی تراپی سر و گردن . دکتر رامین جابری | ۱۴:۳۰ - ۱۵:۰۰ |
| مقایسه توموگرافی کامپیوتری و تصویربرداری رزونانس مغناطیسی در براکی تراپی سرطان دهانه رحم با پارامترهای دزیمتری و بالینی دکتر فاطمه محمدیان | ۱۵:۰۰ - ۱۵:۱۵ |
| آنچه باید متخصصان حوزه رادیوتراپی درباره مواد کنتراست بدانند دکتر رامین جابری | ۱۵:۱۵ - ۱۶:۰۰ |
| دزیمتری در براکی تراپی پلاک چشم در مرکز سرطان پرنسس مارگارت دکتر بیگی اردکانی | ۱۶:۰۰ - ۱۶:۳۰ |

روز دوم: پنجشنبه ۵ بهمن ۱۴۰۲ - سالن هگمتانه برنامه فیزیک پزشکی

| عنوان | زمان |
|--|---------------|
| پنل تکنیک های درمان پیشرفته مسئول پنل: دکتر آرام رستمی اعضای پنل: دکتر علی جمعه زاده. دکتر علیرضا فرج الهی. دکتر محسن صائب | ۸:۳۰ - ۱۰:۳۰ |
| اهمیت آلودگی نوترونی در پرتودرمانی: آری یا خیر Dr. Hector Rene Vega-Carillo | ۸:۳۰ - ۹:۰۰ |
| فلش-پرتودرمانی الکترونی Dr. Giuseppe Felici | ۹:۰۰ - ۹:۳۰ |
| پرتودرمانی فوتون و الکترون با استفاده از گریدترایی Dr. Majid Mohiuddin | ۹:۳۰ - ۱۰:۰۰ |
| پروتون تراپی: چالش های فیزیکی و راهبردها Mr. Abdul Sattar Khalid | ۱۰:۰۰ - ۱۰:۳۰ |
| استراحت | ۱۰:۳۰ - ۱۱:۰۰ |
| پنل دزیمتری و کنترل کیفیت مسئول پنل: دکتر ابوالفضل نیک فرجام اعضای پنل: دکتر فاطمه سیف. دکتر حمید غلامحسینیان دکتر محمودرضا اکبری. دکتر هادی کیوان | ۱۱:۰۰ - ۱۳:۳۰ |
| دزیمتری EPID در پرتودرمانی: از TG-58 (2001) تا TG-307 (2023) دکتر علی جمعه زاده | ۱۱:۰۰ - ۱۱:۳۰ |
| فرایند های کنترل کیفی بر پایه تصویربرداری در IMRT و VMAT دکتر محمد محمدی | ۱۱:۳۰ - ۱۲:۰۰ |
| دزیمتری در پرتودرمانی تمام بدن دکتر محمد محمدی | ۱۲:۰۰ - ۱۲:۳۰ |
| پیامدهای بالینی عدم عملکرد صحیح قطعات شتاب دهنده های مدرن مهندس محمد مهدی خانی | ۱۲:۳۰ - ۱۳:۰۰ |
| صرفه جویی در هیپوکامپ در رادیوتراپی کل مغز: مطالعه دزیمتری بین VMAT و 3D-Conformal IMRT دکتر فاطمه سیف | ۱۳:۰۰ - ۱۳:۱۵ |
| بررسی الگوریتم مدل سازی پرتو در تضمین کیفیت IMRT خاص بیمار دکتر هادی کیوان | ۱۳:۱۵ - ۱۳:۳۰ |
| نماز و ناهار | ۱۳:۳۰ - ۱۴:۳۰ |
| پنل: تصویربرداری در پرتودرمانی مسئول پنل: دکتر محمدرضا بیاتانی اعضای پنل: دکتر علی دیوبند دکتر داوود خضرو. دکتر سید مسعود رضایی جو | ۱۴:۳۰ - ۱۶:۳۰ |
| ارزیابی استحکام طرح IMRT در بیماران مبتلا به سرطان پروستات موضعی با استفاده از سناریوهای عدم قطعیت مختلف. دکتر ابوالفضل کنعانی | ۱۴:۳۰ - ۱۴:۴۵ |
| مقایسه سه پلن های 3D-CRT، استپ و شات IMRT و HT در NPC آقای رسول سوگندی | ۱۴:۴۵ - ۱۵:۰۰ |
| دزیمتری در درمان رادیوفارماسیوتیکال. دکتر علی دیوبند | ۱۵:۰۰ - ۱۵:۳۰ |
| پیش بینی دقیق رویکرد یادگیری عمیق برای پیش بینی دوز با ادغام شکل میدان و آناتومی بیمار در پرتودرمانی بیماران مبتلا به سرطان پستان دکتر محمد احسان راوری | ۱۵:۳۰ - ۱۵:۴۵ |
| تصحیح اعوجاج هندسی خاص بیمار در تصاویر MRI باعث بهبود دقت برنامه ریزی دزیمتری شوانوم دهلیزی درمان شده با گامانایف استریوناکتیک رادیوسرجری می شود. آقای یونس افخم | ۱۵:۴۵ - ۱۶:۰۰ |
| ارزیابی توزیع دز پرتودرمانی با استفاده از رادیوگرافی بازسازی شده دیجیتالی آقای محمد یاسین محمدی | ۱۶:۰۰ - ۱۶:۱۵ |
| بررسی رابطه بین پیچیدگی پرتودرمانی تعدیل شده شدت طرح های سروگردن با نتایج تضمین کیفیت با کمک اندازه گیری های فانتم و تعیین مقادیر آستانه پیچیدگی. خانم فاطمه نصرتی | ۱۶:۱۵ - ۱۶:۳۰ |

کارگاه‌های فیزیک پزشکی

روز اول: چهارشنبه ۴ بهمن ۱۴۰۲

| عنوان | زمان |
|--|---------------|
| ارزیابی پارامترهای طراحی درمان در SBRT و SRS ▪ دکتر محسن بخشنده | ۱۴:۳۰ - ۱۵:۳۰ |
| براکر تراپی داخل نسجی پستان ▪ دکتر علی باقری | ۱۵:۳۰ - ۱۷:۰۰ |

روز دوم: پنجشنبه ۵ بهمن ۱۴۰۲

| | |
|---|---------------|
| طراحی درمان در پرتودرمانی بر پایه شتاب دهنده خطی پیشرفته ▪ دکتر آرام رستمی ▪ مهندس محمدمهدی خانی | ۱۴:۰۰ - ۱۷:۰۰ |
|---|---------------|

روز سوم: جمعه ۶ بهمن ۱۴۰۲

| | |
|---|---------------|
| کامیونینگ پرتوی فوتونی ▪ دکتر آرام رستمی ▪ مهندس محمدمهدی خانی | ۸:۳۰ - ۱۰:۳۰ |
| استراحت | ۱۰:۳۰ - ۱۱:۰۰ |
| کامیونینگ پرتوی فوتونی (ادامه) ▪ دکتر آرام رستمی ▪ مهندس محمدمهدی خانی | ۱۱:۰۰ - ۱۳:۳۰ |
| نماز و ناهار | ۱۳:۳۰ - ۱۴:۳۰ |

روزاول: چهارشنبه ۴ بهمن ۱۴۰۲ - سالن رازی

برنامه تکنولوژی پرتودرمانی

| عنوان | زمان |
|---|---------------|
| <ul style="list-style-type: none">■ محسن معصومی (کارشناس رادیوتراپی)■ نادر سپانلو (کارشناس رادیوتراپی و کارشناسی ارشد مهندسی پرتوپزشکی)■ دکتر فوادگلی احمدآباد (دانشجوی دکتری فیزیک پزشکی) | هیئت رئیسه: |
| سخنرانی افتتاحیه <ul style="list-style-type: none">■ نادر سپانلو (کارشناس رادیوتراپی و کارشناسی ارشد مهندسی پرتوپزشکی) | ۹:۰۰ - ۹:۱۵ |
| IGRT کانسرپرستات توسط شتاب دهنده توموتراپی <ul style="list-style-type: none">■ دکتر فوادگلی احمدآباد (دانشجوی دکتری فیزیک پزشکی) | ۹:۱۵ - ۹:۴۵ |
| اخلاق حرفه‌ای <ul style="list-style-type: none">■ علی عسگریان (کارشناس رادیولوژی) | ۹:۴۵ - ۱۰:۳۰ |
| استراحت | ۱۰:۳۰ - ۱۱:۳۰ |
| <ul style="list-style-type: none">■ امیرھوشنگ صدیق (کارشناس رادیوتراپی و کارشناسی ارشد فیزیک پزشکی)■ اسماء خدادادی (کارشناس رادیوتراپی و کارشناسی ارشد فیزیک پزشکی)■ دکتر مریم یافتیان (دانشجوی دکتری پرتوپزشکی) | هیئت رئیسه: |
| دخالت‌های رادیوبیولوژیکی در Re-Irradiation <ul style="list-style-type: none">■ حدیث مومنی (کارشناس رادیوتراپی و کارشناسی ارشد رادیوبیولوژی) | ۱۱:۳۰ - ۱۲:۰۰ |
| نقش کارشناس رادیوتراپی اکسپرت در Gamma knife with CBCT <ul style="list-style-type: none">■ اسماء خدادادی (کارشناس رادیوتراپی و کارشناسی ارشد فیزیک پزشکی) | ۱۲:۰۰ - ۱۲:۳۰ |
| کاربرد هوش مصنوعی در سگمنتیشن و شناسایی ارگان‌ها و آشنایی با دستگاه شتاب دهنده خطی مبتنی بر هوش مصنوعی <ul style="list-style-type: none">■ دکتر مریم یافتیان (دانشجوی دکتری پرتوپزشکی) | ۱۲:۳۰ - ۱۳:۳۰ |
| نماز و ناهار | ۱۳:۳۰ - ۱۴:۳۰ |
| <ul style="list-style-type: none">■ دکتر مهناز ایلخانی (دکتری تخصصی بالینی)■ نادر سپانلو (کارشناس رادیوتراپی و کارشناسی ارشد مهندسی پرتوپزشکی)■ دکتر سمیه جولانی (دانشجوی دکتری ژنتیک) | هیئت رئیسه: |
| مراقبت‌های پرستاری در رادیوتراپی و آنکولوژی <ul style="list-style-type: none">■ دکتر مهناز ایلخانی (دکتری تخصصی بالینی) | ۱۴:۳۰ - ۱۶:۰۰ |

روز دوم: پنجشنبه ۵ بهمن ۱۴۰۲ - سالن رازی

برنامه تکنولوژی پرتودرمانی

| عنوان | زمان |
|---|---------------|
| هیئت رئیسه: امیر هوشنگ صدیق (کارشناس رادیوتراپی و کارشناسی ارشد فیزیک پزشکی) دکتر سمیه جولانی (دانشجوی دکتری ژنتیک) محسن معصومی (کارشناس رادیوتراپی) | |
| تاثیر رژیم غذایی و تغییر حجم مثانه در جابجایی پروستات وحید شعبانی (دانشجوی دکتری فیزیک پزشکی) | ۹:۰۰ - ۹:۳۰ |
| نقش کارشناسان اکسپرت و با دانش در درمان های پیشرفته و منطبق با پروتکل های درمانی فاطمه فهیمی (کارشناس رادیوتراپی و کارشناسی ارشد فیزیک پزشکی) | ۹:۳۰ - ۱۰:۰۰ |
| ژنتیک و بیوآنفورماتیک فاطمه سلیمانیان (کارشناس رادیوتراپی و کارشناسی ارشد ژنتیک) | ۱۰:۰۰ - ۱۰:۳۰ |
| استراحت | ۱۰:۳۰ - ۱۱:۳۰ |
| هیئت رئیسه: دکتر احمد رضا سبزاری (رادیوانکولوژیست) دکتر مهدیه دیانی (رادیوانکولوژیست) دکتر میترا قالیبافیان (رادیوانکولوژیست) | |
| نقش پزشک رادیوانکولوژیست در پروسه حین درمان بیماران دکتر احمد رضا سبزاری (رادیوانکولوژیست) | ۱۱:۳۰ - ۱۲:۱۰ |
| نقش کارشناس اکسپرت و با دانش بالا در تکنیک های پیشرفته درمانی از دید پزشک رادیوانکولوژیست دکتر مهدیه دیانی (رادیوانکولوژیست) | ۱۲:۱۰ - ۱۲:۵۰ |
| بخش رادیوانکولوژی قرن ۲۱: نمونه ای از تبادل نظر و بین حرفه ای برای بهبود کیفیت درمان دکتر میترا قالیبافیان (رادیوانکولوژیست) | ۱۲:۵۰ - ۱۳:۳۰ |
| نماز و ناهار | ۱۳:۳۰ - ۱۴:۳۰ |
| هیئت رئیسه: سیمین عباسی (کارشناس رادیوتراپی) فاطمه پرتوی راد (کارشناس رادیوتراپی و کارشناسی ارشد پرتوپزشکی) امیر هوشنگ صدیق (کارشناس رادیوتراپی و کارشناسی ارشد فیزیک پزشکی) | |
| بازدید از مرکز رادیوتراپی بیمارستان آدلاید استرالیا از نقطه نظر یک کارشناس رادیوتراپی سیمین عباسی (کارشناس رادیوتراپی) | ۱۴:۳۰ - ۱۵:۰۰ |
| استفاده از کدهای مونت کارلو جهت Individual Radiotherapy فاطمه پرتویی راد (کارشناس رادیوتراپی و کارشناسی ارشد پرتوپزشکی) | ۱۵:۰۰ - ۱۵:۳۰ |
| بهینه سازی تکنیک های درمانی: Breast - CSI - Testis - Brain هانیه اصلانی (کارشناس رادیوتراپی و کارشناسی ارشد فیزیک پزشکی) | ۱۵:۳۰ - ۱۶:۰۰ |

Tenzala[®]
Enzalutamide

Trustimer[®]
Trastuzumab Deruxtecan

AryoTrust[™]
Trastuzumab

Pectuna[®]
Pertuzumab


Orchid Pharmed
Sky's the Limit

 شرکت سیناژن
CinnaGen

ARYOGEN


NAN ALVAND

PADYNEX[®]

Trastuzumab emtansine 100,160 mg

 **Palbocap[®]**

Palbociclib 75,100,125 mg

PacInab[®]
100 mg Paclitaxel
(albumin-bound particles)

TPOral[®]
eltrombopag 25,50 mg

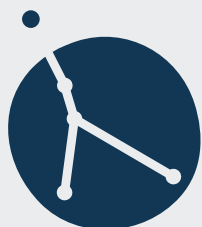
 **simertinib-ND[®]**



RONAK



ronakpharm.com



Ronak
Oncology

ROFOLIN[®]
Calcium Folate

ZOLENA[®]
Zoledronic Acid



BARAN CHEMICAL &
PHARMACEUTICAL Co.



Xalbanib®

Crizotinib 250 mg (Capsule)

ERX CODE: 71808



Regafib®

Regorafenib 40 mg (F.C. Tablet)

ERX CODE: 67883



Nexofenib®

Sorafenib 200 mg (F.C. Tablet)

ERX CODE: 71739



Matinab®

Imatinib 100 mg (F.C. Tablet)

ERX CODE: 71467



Banolib®

Nilotinib 200 mg (Capsule)

ERX CODE: 71504

واحد حمایت از بیمار

۰۹۱۰۶۹۰۲۰۸۴

www.baranpharmaco.ir

Address: First Floor, No.4, 1st Alborz Alley, North Isargaran Street,
Yadegar-E-Imam Highway, Tehran, Iran

P.C: 19817 17165

Tel: +98 21 22072571 +98 21 22131506

Fax: +98 21 22134621



Sequencing is Key



TIME IS IN YOUR HANDS

Consider treatment sequence early on to maximize patient survival in R/M SCCHN:^{1,2}

- 1L Erbitux® + CT* followed by 2L ICI has demonstrated an mOS of up to 22.4 months and 21.9 months in clinical trials and real-world studies respectively³⁻⁵

*Platinum-based CT.

1L, first line; 2L, second line; CT, chemotherapy; ICI, immune checkpoint inhibitor;
mOS, median overall survival; R/M, recurrent and/or metastatic.

1. Argiris A, et al. Front Oncol 2017;7:72 ; 2. Hwang M, Seiwert TY. Lancet Oncol 2021;4:413-415 ; 3. Guigay J, et al. Lancet Oncol 2021;4:463-475; 4. Guigay J, et al. Lancet Oncol 2021;4:463-475 (supplementary appendix); 5. Psyrri A, et al. Ann Oncol 2023;34:262-274.

© 2023 Merck KGaA, Darmstadt, Germany and/or its affiliates. All rights reserved.
NE-ERB-00104



Microrelin s.R. 11.25 mg
Triptorelin Acetate **3-month**



Microrelin s.R. 3.75 mg
Triptorelin Acetate **28-day**



Sandosphere LAR 20 mg
Octreotide



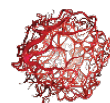
Sandosphere LAR 30 mg
Octreotide



MabThera
R i t u x i m a b



Herceptin[®]
trastuzumab



AVASTIN[®]
bevacizumab

 **Kadcyla**[®]
trastuzumab emtansine

 **PERJETA**[®]
pertuzumab

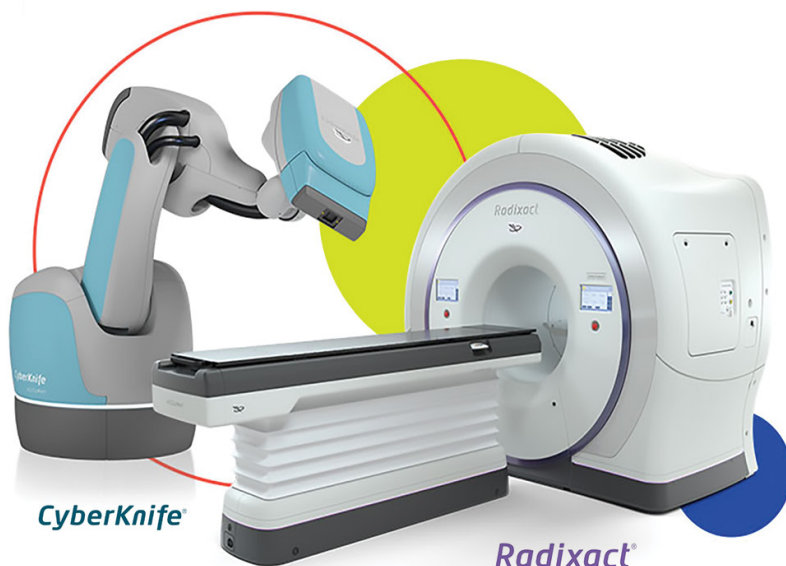
Doing now what patients need next



SOMATOM go.Sim®

SIEMENS
Healthineers

ACCURAY



CyberKnife®

Radixact®

varian

A Siemens Healthineers Company



TrueBeam®



Matlab Arefan Eng.Co
Medical Healthcare Authorized

شرکت مهندسی مطلب عارفان

تجهیزات پزشکی

تهران، میدان آرژانتین، خیابان الوند، کوچه سی و پنجم، پلاک ۸، تلفن: ۰۲۱-۸۸۶۵۱۹۵۰-۵۱

OVER 30 YEARS OF CONFIDENCE ¹⁻⁶



ZOL-405-ST-1225-1223-JRN

1. Zoladex 3.6 mg implant, FDA Label, Available on https://www.accessdata.fda.gov/drugsatfda_docs/label/2009/019776s050/051/052lbl.pdf, last accessed 5 July 2023.
 2. Bolla M, et al., 2010. External irradiation with or without long-term androgen suppression for prostate cancer with high metastatic risk. *Lancet Oncol*, Volume 11, p. 1066-73.
 3. Carrie, C. et al., 2016. Salvage radiotherapy with or without short-term hormone therapy for rising prostate-specific antigen concentration after radical prostatectomy (GETUG-AFU 16): a randomized, multicenter, open-label phase 3 trial. *Lancet Oncol*, Volume 16, pp. S1470-2045.
 4. Zapatero A, et al., 2015. High-dose radiotherapy with short-term or long-term androgen deprivation in localized prostate cancer (DART01/05 GICOR): a randomized, controlled, phase 3 trial. *Lancet Oncol*, Volume 16, p. 320-27.
 5. KARSARY, A. et al., 1991. Comparison of LHRH Analogue (Zoladex) with Orchiectomy in Patients with Metastatic Prostatic Carcinoma. *BJU*, 67(5), pp. 502-508.
 6. Vogelzang, N. et al., 1995. Goserelin versus orchiectomy in the treatment of advanced prostate cancer: Final results of a randomized trial. *Urology*, 46(2), pp. 220-226.

For any adverse event report, product quality complaint or medical information request related to AZ products, you can complete the web-based form accessible 24/7 via the URL: <http://contactazmedical.astrazeneca.com> For medical information requests, you can alternatively send to: medinfo-ne@astrazeneca.com For adverse events reporting, you can alternatively send directly to: Patientsafety.ne@astrazeneca.com Or Contact our office on Tel: +96265827580 or +9611385534. For full prescribing information, please request it from AstraZeneca representative at the exhibition stand.

**THE WAY TO
A BETTER
LIFE**

TINAGRASTTM
Filgrastim
300 Micrograms/0.5mL



TinaKidTM
Filgrastim
150 Micrograms/0.25 mL



TinaPegTM
(Pegfilgrastim)
6 mg / 0.6 mL





PATIENT POSITIONING AND GATING



PATIENT BIOMETRIC VALIDATION & PERSONAL SAFETY

SUPERFICIAL & ORTHOVOLTAGE THERAPY SYSTEMS



TREATMENT PLANNING SYSTEMS

NUCLEAR MEDICINE SYSTEMS AND PET INJECTOR



RADIOTHERAPY & IMAGING PHANTOMS

شرکت رسول زاده و شرکا

تهران - خیابان آفریقا، بلوار اسفندیار، پلاک ۲۱، کدپستی: ۱۹۶۷۹۱۷۵۹۳
تلفن: ۲۲۰۱۵۱۳۱ فکس: ۲۲۰۵۸۸۵۲

21 Esfandiar Blvd., Africa Ave., Tehran 1967917593, Iran
Tel: +98 21 22015131 Fax: +98 21 22058852
E-mail: info@rasoolzadeh.co www.rasoolzadeh.co

YOUR LIFE MATTERS

Etopodāl[®]

Etoposide 100,200 mg

Etoposide is used to treat certain form of lung cancer



Therapeutic indications:

- Testicular cancer
- Small cell lung cancer
- Hodgkin's lymphoma
- Non-Hodgkin's lymphoma
- Acute myeloid leukemia
- Gestational trophoblastic neoplasia
- Ovarian cancer



Cedal | Thinking of Patients



5th floor, No. 16, 145th St., Gisha Ave., Tehran-Iran

+98 21 86190521

info@nanocedal.com

Variopeptyl[®] 11.25

Triptorelin Pamoate



**SWISS
MADE API**



You Can Beat
Prostate Cancer

and you don't need surgery to do it.

3 month
depot

BACHEM
SWITZERLAND

V
VARIAN
PHARMED



تکنومد

ارائه پیشرفته‌ترین روش‌های

درمان سرطان

Elekta



Radiotherapy



MR/RT



Brachytherapy

We are focused
on **precision**
radiation medicine.



Treatment Planning



Oncology Informatics



Radiosurgery



TARAHAN SALAMAT FARDA
A FANAVARI AZMAYESHGARI CO.



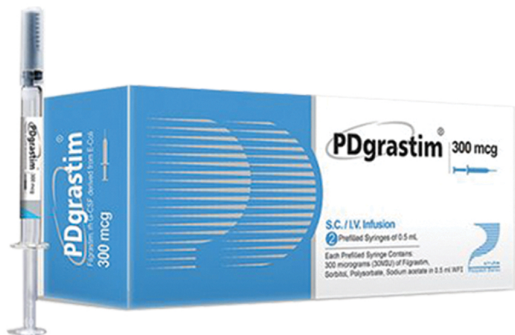
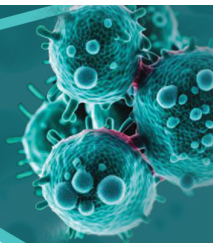
Stereotactic Neurosurgery



Elekta Harmony



Pooyesh Darou
Biopharmaceutical Co.



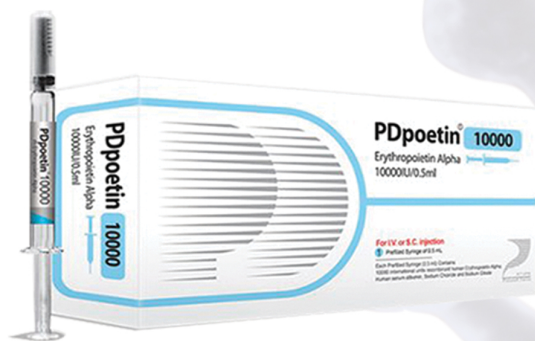
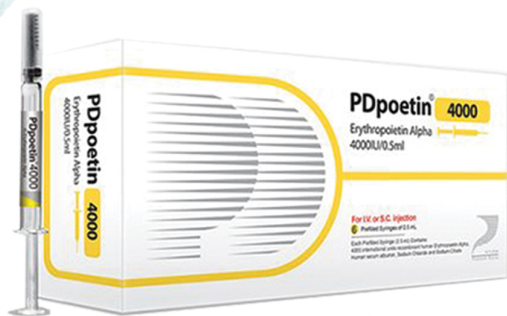
PDgrastim[®]
Filgrastim, rh G-CSF derived from E-Coli



PDlasta[®]
Pegylated filgrastim

Because Life is Precious

A New Song For Life



PDpoetin[®]
4000 / 10000 I.U.

*The First and Most Trusted EPO (Epoetin **Alfa**) Biosimilar*

CONTACT US

+98 21 88 997 248 +98 21 88 969 368

NO. 13, 5th Ave, Fatemi St, Tehran, Iran

info@pooyeshdarou.com















ACTERO PRODUCTS ELECTRONIC CODES















DEVELOPING FUTURE

ACTERO PRODUCTS ELECTRONIC CODES

Brand Codes

| | Form and dosage | Code |
|---|-----------------|-------|
|  Evacim® Bevacizumab | Vial 100 mg | 71707 |
| | Vial 400 mg | 71708 |
|  Zelorec® Capecitabine | Tablet 500 mg | 71384 |
| | | |
|  Xalico® Oxaliplatin | Vial 50 mg | 71514 |
| | Vial 100 mg | 71515 |
|  Rinteca® Irinotecan | Vial 100 mg | 69128 |
| | | |
|  Lipaxol® Paclitaxel | Vial 30 mg | 69133 |
| | Vial 100 mg | 69132 |
| | Vial 150 mg | 70206 |
| | Vial 300 mg | 69131 |
|  Evrolia® Everolimus | Tablet 5 mg | 72022 |
| | Tablet 10 mg | 72337 |
|  Ibract® Palbociclib | Capsule 75 mg | 72672 |
| | Capsule 100 mg | 72671 |
| | Capsule 125 mg | 72260 |
|  Onkotaxel® Docetaxel | Vial 20 mg | 69543 |
| | Vial 80 mg | 69439 |
| | Vial 160 mg | 69441 |
|  Vivabi® Abiraterone | Tablet 250 mg | 72332 |
| | Tablet 500 mg | 72321 |
|  Bratoma® Temozolomide | Capsule 5 mg | 70986 |
| | Capsule 20 mg | 71111 |
| | Capsule 100 mg | 71112 |
| | Capsule 140 mg | 71113 |
| | Capsule 250 mg | 71114 |

| | Form and dosage | Code |
|--|-----------------|-------|
|  Pemaxa® Pemetrexed | Vial 100 mg | 68973 |
| | Vial 500 mg | 68819 |
|  Tinlo® Erlotinib | Tablet 150 mg | 71437 |
| | | |
|  Oncozar® Gemcitabine | Vial 200 mg | 69280 |
| | Vial 1000 mg | 69279 |
|  Carboxa® Carboplatin | Vial 50 mg | 69199 |
| | Vial 150 mg | 69198 |
| | Vial 450 mg | 69387 |
|  Neonib® Nilotinib | Capsule 200 mg | 68947 |
| | | |
|  Dotixa® Dasatinib | Tablet 70 mg | 71848 |
| | Tablet 100 mg | 71847 |
|  Zomiba® Bortezomib | Vial 3.5 mg | 68555 |
| | | |
|  Enlido® Lenalidomide | Capsule 10 mg | 71138 |
| | Capsule 15 mg | 71139 |
| | Capsule 25 mg | 71140 |
|  Fracta® Zoledronic Acid | Vial 4 mg/5 mL | 72151 |
| | | |
|  Luvica® Ibrutinib | Capsule 140 mg | 71464 |
| | | |
|  RITUXIVER Rituximab | Vial 100 mg | 68699 |
| | Vial 500 mg | 68895 |
|  Lykate® Bendamustine | Vial 25 mg | 72590 |
| | Vial 100 mg | 65630 |



Neupogen®

Filgrastim (G-CSF)

AQVIDA



Your **German** Technology for Oncology Products



Non-Small Cell Lung Cancer – Metastatic Breast Cancer*



AN EFFECTIVE ORAL CHEMOTHERAPY TO START WITH^{††}



Recommended by
International Guidelines[†]

NCCN

ASCO

ESMO/ABC5



* NAVELBINE® Oral is indicated as a single agent and in combination chemotherapy for the treatment of Non-Small Cell Lung Cancer and Metastatic Breast Cancer

Navelbine Oral SmPC, August 2021

Navelbine IV SmPC, August 2021

For more detailed information about the product, refer to the complete SmPC by scanning the above QR code

* ASCO Guidelines for MBC, Moy et al. J Clin Oncol 2021
ASCO Guidelines, Stage I to IIIA Completely Resected NSCLC, Kris et al. J Clin Oncol. 2017/ASCO Guideline Rapid Recommendations Update.
Pisters et al. J Clin Oncol 2022, V 40, Issue 10, 1127-1129
ASCO Living Guidelines, Therapy for Stage IV NSCLC Without Driver Alterations, Singh et al. December 2022
ASCO Living Guidelines, Therapy for Stage IV NSCLC With Driver Alterations, Singh et al. December 2022
ASCO Guidelines, Management of Stage III Non-Small-Cell Lung Cancer: ASCO Guideline, Daly et al. J Clin Oncol, 22 Dec 2021
ESMO Guidelines, 2021 Early and LA NSCLC e-update in referral to Postmus et al. Ann Oncol (2017) 28 (suppl 4): iv1-iv21
ESMO Clinical Practice Guidelines, Metastatic non-small cell lung cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up.
Originally published in 2018 (Planchard et al.) - Ann Oncol (2018) 29 (suppl 4): iv192-iv237. Approved by ESMO Guidelines Committee. Feb 2022
ESMO Clinical Practice Guideline MBC, Gennari et al. Ann Oncol, 2021
NCCN Clinical Practice Guidelines in Oncology, Breast Cancer, V.4, 2022, June 21, 2022
NCCN Clinical Practice Guidelines in Oncology, NSCLC, V1, 2023, December 22, 2022

^{††} As proven in clinical trials


**Pierre Fabre
Oncology**

A Pierre Fabre Médicament division

SANDOZ

Making
Medical innovation
More accessible and
Affordable¹



1 - <https://www.sandoz.com/business/manufacturing-quality-and-supply>