
Happy New Year!
2026
Time to set new intentions and
embrace the journey ahead
with excitement and joy.
Happy New Year!

AROI NEWS

NEWSLETTER OF ASSOCIATION OF RADIATION ONCOLOGISTS OF KARNATAKA

ISSUE - DECEMBER 2025

EDITOR'S NOTE

I am pleased to present the latest issue of AROI News. like in our previous issues, I have tried to maintain the modern and crisp design of the newsletter to make it an engaging read.

I have compiled the activities conducted in Various Institutions across Karnataka from July 2025 to December 2025. Including faculty accomplishments, articles published and events from national chapter. A section dedicated to forthcoming conferences, both national and international has also been included.

A glimpse of the CME conducted by our association is also included in this issue along with the achievements of faculty & students in AROICON 2025.

Happy to announce the release of our association website: aroikar.com

I am grateful to all the office bearers and AROI members for allowing me to work on the newsletter. I appreciate any feedback, recommendations, or criticism regarding the newsletter that may help me do better, in the future editions.

DR. VISHAL MALAVADE MD
Editor in Chief
Consultant Radiation Oncologist
RadOn Cancer Centre
Hubbali

TABLE OF CONTENTS

Association Registration Renewal

ಕರ್ನಾ ಟಕ ಸರ್ಕಾ ರ
(ಸಹಕಾರ ಇಲಾಖೆ)
ನೋ ಂದಣಿ ಸಂಖ್ಯೆ : 31/2014-15
ವಾಲೆಪ್ ಸಂಖ್ಯೆ : 360/2025-26

- ಸ್ವೀಕೃತಿ ಪತ್ರ-

ಕರ್ನಾ ಟಕ ಸಂಘಗಳ ನೇ ಂದಣಿ ಕಾಯಿದೆ 1960 ರ ಕಲುಮ್ 13ರನ್ವಾಯ ಸಲೀಸ ಬೇಕಾದ 2014-15 ರಿಂದ 2023-24ನೇ ಸಾಲಿನ ಲೆಕ್ಕಪತ್ರಗಳು/ಸರ್ವ ಸದಸ್ಯದ ಪ್ರಭೆಯ ನಡವಳಿಕೆ ಹಾಗೂ 2024-25ನೇ ಸಾಲಿನ ಕಾರ್ಯ ಕಾರಿ ಸಮಿತಿ ಪಟ್ಟಿಯನ್ನು

"ASSOCIATION OF RADIATION ONCOLOGIST OF KARNATAKA "
No.44-45/2, 2nd Cross, Raja Rammohan Roy, Extn, Off. Lalbagh Double Road, K.H. Road, Bangalore-560027.

ಸಂಘದ ಅಧ್ಯಕ್ಷರು/ಕಾರ್ಯ ದರ್ಶಿ ಯವರು ದಿನಾಂಕ: 24-07-2025 ರಂದು ಪ್ರಸ್ತಾವನೆ ಸಲ್ಲಿಸಿರುತ್ತಾರೆ. ಸದರಿ ದಸ್ತಾವೇ ಜುಗಳನ್ನು ದಿನಾಂಕ: 11-11-2025 ರಂದು ದಾಖಲಿಸಿದೆ. ಪಾವತಿಸಬೇ ಕಾದ ಫೈ ಲಿಂಗ್ ಶುಲ್ಕ ರೂಪಾಯಿ.6.200/-ಗಳನ್ನು (ಅಕ್ಷರಗಳಲ್ಲಿ ಆರುಸಾವಿರದ ಇನ್ನೂರು ಮಾತ್ರ) ಪಾವತಿಸಿರುತ್ತಾರೆ.

<u>ಈ ಸ್ವೀಕೃತಿ ಪತ್ರ ಕೆಳಕಂಡ ಷರತ್ತುಗಳಿಗೆ ಒಳಪಟ್ಟಿರುತ್ತದೆ.</u>

1. ಸಂಘದ ಚಟುವಟಿಕೆಗಳು ಸಾರ್ವ ಜನಿಕರ ಕಾರ್ಯ ನಿರ್ವ ಹಿಸುತ್ತಿದೆ ಎಂದು ಕಂಡು ಬಂದರೆ, ಹಿತಾಸಕ್ತಿಗೆ ಕಾನೂನಿಗೆ ವಿರುದ್ಧವಾಗಿ
2. ಸಂಘದ ಬಗ್ಗೆ ನ್ಯಾ ಯಾಲಯಗಳಲ್ಲಿ ಅಥವಾ ಯಾವುದೇ ಅಧಿಕಾರಿಯವರ ಮುಂದೆ ವಿಚಾರಣೆ ನಡೆದು ಸಂಘವು ಸಲ್ಲಿಸಿರುವ ಪ್ರಸ್ತುತ ದಾಖಲೆಗಳು ಸಿಂದುವಲ್ಲವೆಂದು ಧೃಡಪಟ್ಟರೆ.
3. ಸಂಘದಲ್ಲಿ ಸ್ವೀಕರಿಸಿರುವ ಎಲ್ಲಾ ರೀ ತಿಯ ವಂತಿಗೆ ಹಾಗೂ ಸದಸ್ಯತ್ವ ಶುಲ್ಕವನ್ನು ಸಂಘದ ಉದ್ದೇಶಗಳಿಗಾಗಿ ಬಳಸದೆ, ಯಾವುದೇ ರೀ ತಿಯ ಹಣ ದುರುಪಯೋ ಗವಾಗಿದೆ ಎಂದು ಕಂಡುಬಂದರೆ.
4. ಸಂಘವು ನೀ ಡಿರುವ ದಾಖಲಾತಿಗಳಲ್ಲಿ ಯಾವುದೇ ರೀ ತಿಯ ಆಕ್ಷೇಪಣೆಗಳು/ಲೋ ಪದೋ ಷಗಳು ಕಂಡು ಬಂದಲ್ಲಿ ಅಥವಾ ಸಂಘಕ್ಕೆ ಸಂಬಂಧಪಟ್ಟಂತೆ ಯಾವುದೇ ರೀ ತಿಂ/ನು ದೂರುಗಳು ಸಾರ್ಧಿ ತಾದಲ್ಲಿ.
5. ಲೆಕ್ಕ ಪತ್ರಗಳು ಅಥವಾ ಆದಾಯ ಮತ್ತು ವೆಚ್ಚಗಳಲ್ಲಿ ತಪ್ಪು ಮಾಹಿತಿ ನೀ ಡಿ ಸರ್ಕಾ ರಕ್ಕೆ ಪಾವತಿಸಬೇ ಕಾದ ಶುಲ್ಕದಲ್ಲಿ ಕಡಿಮೆ ಪಾವತಿ ಸಾಬೀ ತಾದಲ್ಲಿ.
6. ಸಂಘದ ಲೆಕ್ಕಪತ್ರಗಳು ಹಾಗೂ ಕಾರ್ಯ ಕಾರಿ ಸಮಿತಿ ಸದಸ್ಯರ ಮಾಹಿತಿ ಸಂಬಂಧ ಸಲ್ಲಿಸಿರುವ ಯಾವುದೇ ದಾಖಲಾತಿಗಳು ತಪ್ಪು ಮಾಹಿತಿಯಿಂದ ಕೂಡಿದ್ದರೆ.
7. ಇನ್ನು ಮುಂದೆ ಸಂಘದ ಸರ್ವ ಸದಸ್ಯರ ಸಭೆ ಹಾಗೂ ಕಾರ್ಯ ಕಾರಿ ಸಮಿತಿ ಚುನಾವಣೆಯನ್ನು ಕಾಲಕಾಲಕ್ಕೆ ಜರುಗಿಸಿ, ಸಕಾಲದಲ್ಲಿ ಲೆಕ್ಕಪತ್ರಗಳನ್ನು ಸಲ್ಲಿಸಿ, ಸ್ವೀಕೃತಿ ಪಡೆಯತಕ್ಕದ್ದು. ತಪ್ಪಿದಲ್ಲಿ ಈ ಸ್ವೀಕೃತಿಯನ್ನು ರದ್ದುಪಡಿಸಲಾಗುವುದು ಲೋ ಪವಾದಲ್ಲಿ ಸಂಘದ ಕಾರ್ಯ ಕಾರಿ ಸಮಿತಿಯ ಸದಸ್ಯರೇ ಹೊ ಣೆಗಾರರಾಗುತ್ತಾರೆ.
8. ಈ ಸ್ವೀಕೃತಿಯನ್ನು ಸಂಘದ ನಿಬಂಧನೆಯಲ್ಲಿ ಏನೇ ಇದ್ದರೂ ಸಹ ಕರ್ನಾ ಟಕ ಸಂಘಗಳ ನೋ ಂದಣಿ ಅಧಿನಿಯಮ 1960ರ ಚೌಕಟ್ಟಿನಲ್ಲಿಯೇ ಕಾರ್ಯ ನಿರ್ವ ಹಿಸಬೇ ಕೆಂಬ ಷರತ್ತಿಗೆ ಒಳಪಟ್ಟು ನೀ ಡಲಾಗಿದೆ. ಒಂದುವೇ ಳೆ ಸದರಿ ಅಧಿನಿಯಮಕ್ಕೆ ವ್ಯತಿರಿಕ್ತವಾದ ಉದ್ದೇಶಗಳನ್ನು ಸಂಘ ಕಾರ್ಯ ಚಟುವಟಿಕೆಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊ ಂಡಿದ್ದಲ್ಲಿ ಅಥವಾ ನಿರ್ವ ಹಿಸಿದ್ದಲ್ಲಿ ಅಂತಹ ಸಂದರ್ಭ ದಲ್ಲಿ ಅಸಿಂಧುವಾಗುತ್ತದೆ.

ಸಂಘಗಳ ಜಿಲ್ಲಾ ನೋ ಂದಣಾಧಿಕಾರಿಗಳು
ಎರಡನೇ ವಲಯ, ಬೆಂಗಳೂರು ನಗರ ಜಿಲ್ಲೆ

Meeting Abstract: 2025 ASCO Annual Meeting I

FREE ACCESS | Central Nervous System Tumors | May 28, 2025

Azeliragon, a RAGE inhibitor, in combination with temozolomide and radiotherapy in patients with newly diagnosed glioblastoma: Preliminary results of phase Ib/II CAN-201 NDG trial.

Authors: Juan Manuel Sepulveda, Manuel Valiente, María Martínez-García, Estela Pineda, María Ángeles Vaz-Salgado, María Ruiz Vico, Gabriel Velilla, Manuel Mazariegos-Rubi, Izaskun Valduvieco, Maria Castro Henriques, Laia Cano, and Stephen Garrett Marcus | AUTHORS INFO & AFFILIATIONS

J Clin Oncol 43, 2069(2025) • Volume 43, Number 16_suppl • DOI: 10.1200/JCO.2025.43.16_suppl.2069

Azeliragon, aRAGE inhibitor, in combination with temozolomide and radiotherapy in patients with newly diagnosed glioblastoma: Preliminary results of phase Ib/IICAN 201 NDG trial

RAGE Inhibitor | Increasing RT Efficacy | Glioblastoma

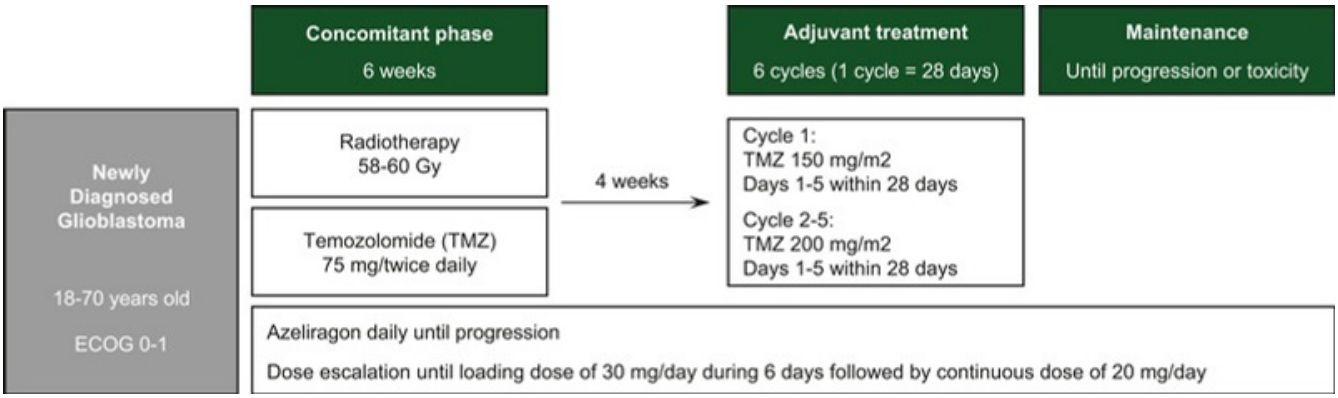
Background: Azeliragon is an orally available inhibitor of the receptor for advanced glycation end-products (RAGE). RAGE pathway promotes cell proliferation and angiogenesis, contrib uting to glioblastoma (GBM) progression and resistance to temozolomide (TMZ) and radiation (RT). Azeliragon has extensive clinical safety data in patients (pts) with Alzheimer's disease. Our hypothesis was that azeliragon may enhance the efficacy of Stupp regimen in newly diagnosed GBM.

Methods: CAN-201 NDG is an open-label, single arm, phase Ib/II trial in Spain. Newly diagnosed IDH wild-type pts with GBM, MGMT methylation locally available and with tumor resection were recruited. Pts received azeliragon in combination with standard radiotherapy and TMZ followed by maintenance with azeliragon. Thetrial consists of an initial dose finding phase in a 6 dose escalation strategy with a subsequent expansion phase (upto 14 additional pts) at the recommended phase 2 dose (RP2D). The dose levels were: 5 mg/day (L1), 10 mg/day (L2) and 20mg/day(L3).The primary objective is to determine the RP2D, defined as the dose for which , 33% pts experience a dose limiting toxicity (DLT) within 28 days from initiation of dosing. Main secondary end points include progression-free survival (PFS),overall survival (OS) and changes in corticosteroid requirements.

Results: From Oct 2023 to Jul 2024, 20pts wereincluded, 6 in L1, 8 in L2and 6inL3. Themedian agewas52years(range: 40-69). Most pts were male (65%), ECOG 0-1 (95%) and MGMT unmethylated (60%). No DLTs were observed. Serious adverse events, all considered unrelated to azeliragon, were reported in 4 pts (20%), being hemiplegia,

pyrexia, infectious meningo-encephalitis, epilepsy & neurological decompensation. Non-serious Grade 3-4 adverse events (AE), also considered unrelated, were G3 hematological AEs in 33.3% in L1 and 37.5% in L2.G1-2 azeliragon-related AEs were reported in 33.3%, 25% and 66.7% of pts in L1,L2 and L3, respectively. Azeliragon treatment was ended due to progression in 83.3% and 62.5% of pts in L1 and L2, respectively. All pts on L3 are still on treatment. With a median follow-up time of 8.4 months, pts in L1 showed a median PFS of 5.2 months (95% CI, 4.4-Not Reached [NR]) and 9.8 months (95% CI, 6.2-NR) in L2. No progression of disease was observed in L3 with a range of follow-up of 4.9-7.0 months. Median OS in L1 was 11.1 months (95% CI, 9.4-NR). Data was not mature enough to calculate OS in L2 and L3.

Conclusions: Azeliragon in combination with standard RT and TMZ is safe, with no dose-limiting toxicities reported so far at the initial three dose levels. To further explore the safety and efficacy profile of azeliragon, we are now expanding the study to include two additional dose levels of 30 mg/day (L4) and 50 mg/day (L5). Enrollment is currently open for level L4. Clinical trial information: NCT05635734. Research Sponsor: CANTEX Pharma ceuticals, Inc



Flow chart with the design of the trial CAN-201: a phase I/II open-label study to assess safety and preliminary evidence of a therapeutic effect of azeliragon combined with conventional concurrent radiation and temozolomide in patients with newly diagnosed glioblastoma. ECOG, Eastern Cooperative Oncology Group.

World Neurosurgery
Volume 204, December 2025, 124598

Letter to the Editor

Letter to the Editor Regarding: "A Systematic Review and Meta-Analysis of Radiation Necrosis Incidence in Brain Metastasis Treated by Gamma Knife and CyberKnife Stereotactic Radiosurgery"

Vangipuram Shankar [1], Vangipuram Harshil Sai [2], Sudarshan Gupta [3]

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[2] Department of Undergraduate Education, All India Institute of Medical Sciences (AIIMS), New Delhi, India
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Dr. Sudarshan Gupta
Associate Consultant
Narayana Health
Shimogga

To the Editor

In the spirit of advancing scientific discussion, we commend Walker et al. for their article, "A Systematic Review and Meta- Analysis of Radiation Necrosis Incidence in Brain Metastasis Treated by Gamma Knife and CyberKnife Stereotactic Radiosurgery" (World Neuro surgery, 2025; 202:124390). Their comprehensive meta-analysis comparing radiation necrosis (RN) after Gamma Knife (GK) and CyberKnife (CK) stereotactic radiosurgery across 52 studies and 9186 patients found no significant difference in RN incidence between modalities and identified diagnostic inconsistency as the principal barrier to meaningful comparison. Their conclusion invites a broader reflection: what does it mean when we measure a complication more precisely than we define it?

BEYOND STATING THE LIMITATION

Only 7.6% of GK-related and 5.1% of CK-related RN events were biopsy-confirmed; the remainder relied on variable magnetic resonance imaging (MRI) interpretations. This high heterogene ity (I =81% for GK and 71% for CK) reflects the field's inter pretive fragmentation rather than the authors' methodology. Our challenge is now epistemic rather than technical. When "radiation necrosis" can denote transient edema at 1 center and histopathologic necrosis at another, the pooled incidence loses its biological meaning. Until reproducible imaging-pathologic standards emerge—potentially incorporating perfusion MRI, MRI spectroscopy, or Positron Emission Tomography—the pre cision of the measurement will continue to outpace the clarity of the definition.

DOSE, DEVICE, OR DIAGNOSTIC DRIFT? Walker et al. also observed that higher median doses and longer follow-up, as in Miller et al. 2 (36.3 Gy, 26 months), may inflate reported RN rates within the GK cohort. This underscores a larger truth: statistical control cannot resolve conceptual variability. 2 When studies define RN differently, adjusting for dose, follow- up, or whole brain radiation therapy simply redistributes the interpretive error. The resulting meta-regression

—yielding R =0%—shows that heterogeneity can be quantified but not explained without diagnostic calibration. Future research should therefore emphasize standardization before synthesis: unified definitions, centralized imaging reviews, and prospective vali dation must precede the pooling of data.

THE PARADOX OF NECROSIS AND CONTROL Walker et al. found that studies with higher RN incidence (>7%) were associated with significantly improved 12-month survival (odds ratio 1.22; P < 0.01). This echoes the Miller et al. series, in which patients with RN achieved a median survival of 26 months versus 12 months in those without RN. These findings suggest that RN, although an adverse effect, may also indicate robust local control or an immune-mediated tumor response. Rather than viewing necrosis solely as toxicity, it may represent a radiobiological signature of efficacy, a dual identity warranting prospective mechanistic exploration.

PUBLICATION BIAS AND THE SILENCE OF ZEROES Egger test revealed strong funnel asymmetry (P < 0.0001 GK; P =0.0004 CK) with about 17 missing low-RN studies—the "zero-event" experiences rarely published. This underreporting sustains the illusion that RN is both ubiquitous and device specific. Statistical correction can reshape a funnel plot, but not the premise—bias persists until definitions align.

TOWARD DIAGNOSTIC STANDARDIZATION Progress now depends on redefining, not remeasuring, the RN. Radiomic classifiers using texture entropy, diffusion kurtosis, and perfusion indices have already distinguished RN from recurrence with accuracies above 85%. Incorporating such quantitative tools into multi-institutional registries could transform RN from a subjective label into a measurable phenotype. Parallel reforms should include the following: 1. Unified imaging criteria validated against pathology. 2. Consistent lesion reporting (volumes—gross target volume/clinical target volume and diameter). 3. Stratification by systemic therapy, particularly immunotherapy, and targeted agents that modify RN risk. Through such calibration, the limitation identified by Walker et al. can evolve into the next methodological milestone in the field.

CLINICAL RELEVANCE For practicing radiosurgeons, the message is reassuring: neither GK nor CK is inherently more necrotic than the other. Platform choice should be based on workflow, expertise, and lesion ge ometry, not presumed radiobiologic safety. The greater challenge is diagnostic clarity because clinical consequences flow from interpretation, overtreating pseudoprogression, or missing recurrence misclassified as RN.

CONCLUSION Walker et al. demonstrated that the GK-versus-CK debate is less about beam geometry than definitional geometry. The future of radiosurgery lies in harmonizing our understanding of necrosis and the manner in which we deliver the dose. Estab lishing standardized radiologic-pathologic criteria validated through radiomics and prospective data sharing will allow the field to advance from comparative description to predictive precision. Until then, radiation necrosis will remain—ironically—our most precisely measured uncertainty.

51st AROI ICRO SUN Postgraduate Teaching Programme

Successfully conducted on the 11th and 12th of October, 2025

Vydehi Institute of Medical Sciences and Research Centre, Bangalore.

The 51st AROI SUN Postgraduate Teaching Program was successfully conducted on the 11th and 12th of October, 2025 at Vydehi Institute of Medical Sciences and Research Centre, Bangalore.

The academic event focused on —Paediatric and Hematological malignancies and was organized by the Department of Radiation Oncology. The program was formally inaugurated by Principal of VIMS & RC Dr. Shreedhar Venkatesh, and Medical Superintendent Dr. M.Umamaheswar, AROI President Prof.(Dr). S. N. Senapati, AROI Secretary General Dr. Srinivasan, ICRO Secretary Dr. Pooja Nandwani Patel. During the inaugural session, the dignitaries emphasized the significance of gaining in-depth knowledge in paediatric and hematological malignancies as these cancers present unique challenges in diagnosis and treatment .They also stressed the need for such focussed courses to equip the Radiation Oncology residents to manage these complex cases .

The teaching sessions witnessed active participation from more than 80 postgraduate students across the country. Distinguished national faculties delivered comprehensive lectures, resolved participants' queries, and enriched the academic discussions with their expertise.

The highlight of the academic event was the panel discussion conducted by Prof.(Dr .)S.N.Senapathi .The entire program was conducted smoothly by Dr.Geeta.S.Narayanan (Program Director) and Dr. Arpitha.S (Organizing Secretary) with maximum attendance on both the days . The event concluded with a quiz competition, in which Dr Omal Shereef (Mahavir Cancer Sansthan and Research Centre, Patna) and Dr Avilash Banerjee (Yashoda Institute of Cancer Centre, Hyderabad) emerged as winners. Both candidates were awarded a fully sponsored trip to Kolkata to attend the forthcoming AROI Conference. The program concluded with a valedictory session and distribution of certificates.


Indian College of Radiation
Oncology (ICRO)
Academic wing of


For the treatment of
moderate to severe cancer pain


For the treatment of

CME

Successfully conducted the CME program on updates in Gynaec malignancies in association with KSC-AGOI, with 50+ Attendees & engaging discussions on advances in cervical cance radiation, screening, SLNB & endometrial cancer

Felicitation of AROICON 2024 Mangalore, AROKSON 2025 organizing committee & past AROK Executive committee members was done during the CME.

SCIENTIFIC SCHEDULE

Sl No	Topic	Speakers	Time
1	Welcome address by	**Dr.Siddanna R Palled** President AROI-Karnataka. **Dr. Shoba** President KSC- AGOI.	18:00 to 18:10
2	Role of Sentinel lymph node sampling and dissection in early stage carcinoma cervix	**Dr. Shobha K** Professor &Head Dept. Gynec-Oncology, KMIO, Bangalore	18:10 to 18:30
3	Role of advanced radiation therapy techniques in the treatment of carcinoma cervix.	**Dr. Imtiaz Ahmed** Professor & Head Dept. Radiation Oncology JNMC, Belagavi	18:30 to 18:50
4	Panel Discussion: Management of Pre-invasive Cervical cancer	**Moderator:** Dr. Priyaroseni **Panelist:** **Radiation Oncology** Dr. Simon Paul, Dr. Chaitanya **Gynec Oncology** Dr. Fathima Dr.Sireesha	19:00 to 19:20
5	Panel Discussion: Adjuvant Treatment in stage –I Intermediate and High risk endometrial cancer	**Moderator:** Dr.Vishal Malvade **Panelist:** **Radiation Oncology** Dr. Jaswanthi, Dr. Lithika Dr. Priya **Gynec Oncology** Dr. Fathima **Medical Oncology** Dr.Anup R Hegde	19:30 to 19:50
6	Felicitation	• Office bearers of AROI-KC • Organizing Committee of AROICON-2024 & AROKSCON-2025	20:00 to 20: 15
7	Vote of thanks	**Dr. Rekha** Secretary KSC- AGOI Consultant Gynec-Oncologist Shankara Hospital	
8	Dinner	20: 30 Onwards	

AROI - Karnataka Chapter

invites you to join

ONLINE CME ON ELECTRON THERAPY

Wednesday
17 September 2025

Time
18:00 onwards

Google Meet Link
meet.google.com/czm-jcgs-yiy

Electron Therapy : Indications and Planning in present clinical practice

Dr. Abhishek Krishna
Asstant Professor
Dept. Of Radiation Oncology, KMC Mangalore

Total Skin Electron Therapy : Planning & Implementation

Dr. Ram Alva
Consultant Radiation Oncologist
Aster CMI Hospital, Bengaluru

Scan here to join the meet

Time	Topic	Speakers
18:00 to 18:10	Welcome Address	Dr. Siddana Palled
18:15 to 18:40	Electron Therapy : Indications and Planning in present clinical practice	Dr. Abhishek Krishna
18:45 to 19:10	Total Skin Electron Therapy : Planning & Implementation	Dr. Ram Alva
19:10	Vote of Thanks	Dr. Sunil RA

AROI KC Executive Committee

Dr. Sidanna R Palled
President, AROI KC

Dr. Ravindra Ganganna
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Dr. Sai Kumar
EC Member. AROI KC

Dr. Shamsundar S D
EC Member. AROI KC

Dr. Syed Zeeshan
EC Member. AROI KC

Dr. Paul Simon
EC Member. AROI KC

Dr. Shruthi
EC Member. AROI KC

CME

Post graduate sudents were made the panelists to giv them opportunity to present themselves over the stage

NEW CENTRE

Greetings from **HCG CANCER CENTRE HUBLI**. It gives us immense pleasure to express that HCG has started a new state of the art radiation machine, the new **elekta versa HD**.

Association of Radiation Oncologists of Karnataka

CONGRATULATIONS TO THE FELLOWSHIP AND AWARD WINNERS AT AROICON 2025 !

BEST PAPER AWARDS FROM AROI

Dr MC Pant Gold Medal Award

Dr. Urvashi Gupta
KMIO, Bengaluru

Best Proffered Paper <40 years Category

Dr. Shirley Lewis
Kasturba Medical College, Manipal

FELLOWSHIP

International Fellowship > 50 years category

Dr. Siddanna Palled
Kidwai Memorial Institute of Oncology
Bengaluru

International Fellowship 35 -40 years category

Dr. Shirley Lewis
Kasturba Medical College
Manipal

International Fellowship 30 -35 years category

Dr. Abhishek Krishna
Kasturba Medical College
Mangalore

BEST VIDEO & POSTER AWARD

Best Video Presentation Award

Dr. Suneeta N
Aster Hospital
Bengaluru

Dr. Ram Charith Alva
Aster Hospital
Bengaluru

Best Poster Award (CNS Track)

Dr. Thomas Kindangan
St. John's Medical College
Bengaluru

With warm regards

Achievements

KMC Manipal

Dr Shirley Lewis Salins- Professor and Head

AROICON 2025:

Best Paper <40 years- Outcomes of Active Breathing Coordinator (ABC) Breath Hold-Based Stereotactic Body Radiotherapy for Hepatocellular Carcinoma from a Tertiary Cancer Centre in India.

Fellowship award- 35-40 years International Fellowship.

- **Dr Rabia Angiras- Senior Resident**

Oral Paper in Gynec-oncology in AROICON 2025- Outcomes of Stage IV cervical cancer patients treated with chemoradiation: a retrospective study.

Residents KMC Manipal:

Eposter for Best Paper Category in AROICON 2025:

- **Dr Anoushka Taneja**- PET-CECT GUIDED DOSE ESCALATION IN LOCALLY ADVANCED HEAD AND NECK SQUAMOUS CELL CARCINOMA
- **Dr Salma Shams**- Correlating outcomes of Oral cavity cancer patients treated with adjuvant radiotherapy with pathologic factors- retrospective analysis.
- **Dr Pranav PV** – Clinical outcomes, toxicity and dosimetry of radical radiotherapy in carcinoma prostate.

Achievements

INTERNATIONAL FELLOWSHIPS COMPLETED

- **Dr S D Shamsundar Associate Professor KMIO Bangalore**

Fellowship:

AROI 35-40 years fellowship: completed 1 month GI fellowship at Peter MacCullum Cancer Center, Melbourne in October 2024.

- **Dr Umesh Velu- Associate Professor**

Fellowship:

Completed UICC Technical Fellowship on SRS and SRT for Brain Metastases at University of Colorado Cancer centre, USA April-May 2025with an award of 5800 USD.

- **Dr Jayashree NP – Assistant Professor**

Fellowship:

AROI 30-35 years fellowship- Completed International Fellowship in Breast Cancer with special focus on Preoperative Radiation under Dr Navita Somaiah at Royal Marsden Hospital Nov 1-Nov 28 2025.

- **Dr Sapna - Associate Professor JNMC Belgaum**

Fellowship:

AROI 35-40 years fellowship- completed at UNIVERSITY MEDICAL CENTRE – AMSTERDAM, NETHERLANDS.

Achievements

ASTER WHITEFIELD ABSTRACTS IN VARIOUS CONFERENCES

Dr Suneetha N

Consultant radiation Oncologist
Aster Whitefield Hospital

FARO 2025: Poster presented by Dr. Suneetha N
Intraoperative Electron Radiation Therapy Boost in the Treatment of Primary Breast Cancer - Single Institution Experience from India

AROICON 2025: IOeRT in recurrent tumours: Oral Presentation for Best Proffered Paper in above 40 year category -**presented by Dr. Suneetha N**

AROICON 2025: IOeRT Video presentation for Proffered Session- Video Category- presented by Dr. Suneetha N
https://drive.google.com/file/d/14Z-WcRjgAVEPxSDKzirPsNQUdS04ox7c/view?usp=drive_link

Dr Ram C Alva

Consultant radiation Oncologist
Aster Whitefield Hospital

AROICON 2025: SGRT Video presentation for Proffered Session- Video Category- presented by Dr. Ram C Alva
https://drive.google.com/file/d/1i_Ns6Ba99LCuzHp-Amiy8usl5svHV7kj/view?usp=drive_link
(Won Best Video Presentation)

Title: A prospective study to evaluate the plan of the day radiation therapy using conformal technique in locally advanced cervical cancer

Authors: Dr Urvashi Gupta, Dr Siddanna R Palled, Dr Sunil R A, Dr Sanjeet Mandal, Dr Bindu V, Dr Naveen T. Department of Radiation Oncology, Kidwai Memorial Institute of Oncology

Awarded M C Panth Gold Medal Award and 10000rs travel grant.

BACKGROUND: Due to anatomical position of the cervix it is bound to change with the motion of the surrounding structure hence, definitive pelvic IMRT is susceptible to geographic miss the target due to daily positional and volumetric variations. Standard population based margin recommendations are of limited benefit because of the large inter-patient variability in cervix/uterus motion. To guarantee adequate coverage for a large proportion of patients, generous margins of 24 to 40 mm are required. However, those generous margins jeopardise tissue-sparing properties of IMRT leading to more toxicities. Thus, knowledge of organ motion within the CTV and the influences of adjacent organ filling (bladder, rectum, bowel) is required to determine an appropriate ITV.

OBJECTIVE OF THE STUDY:

- Primary Objective -To determine the position of GTV with respect to changes in volume of rectum and urinary bladder
- Secondary Objective -To assess the disease free survival and overall survival -T o assess the acute and chronic toxicities with respect to GI and GU tract.

METHODS: All locally advanced carcinoma cervix patients aged from 18-70 years with FIGO stage IIB-IVA with ECOG <2, who provided written informed consent were recruited. A complete clinical evaluation including local gynaecological , all blood investigations was performed. Radiological imaging was done with CXR, MRI abdomen and pelvis to correctly stage the patient. The pathological grade of the tumour and its histopathological subtype was identified and documented. Following fiducial insertion to the visible growth in the cervix and advising the patients to follow standard bladder and rectal protocols, patients were simulated and 3 different IMRT plans were generated with ITV margins of 15mm(ITV1), 10mm(ITV2) and 5mm(ITV3) to CTV-P and uniform margin of 3mm was given to ITV and CTV N to make 3 different PTVs. Daily CBCTs were taken and bony markings were matched and the CTV fitting to the smallest PTV was chosen for that particular day as the PLAN OF THE DAY which was done for all the fractions. All the patients were advised for weekly concurrent chemotherapy. All CBCT images was analysed to check for the GTV movement. All patients received ICBT-HDR brachytherapy. Patients were asked for monthly follow up and looked for acute and chronic toxicities.

RESULTS: 66 patients with (mean age of 55.6±8.9 years) advanced cervical cancer were included in the current study, majority of the patients belonged to stage II and were diagnosed case of squamous cell carcinoma. Mean GTV inter-fraction movement was to be 0.23cm in medio-lateral direction, 0.37cm in cranio-caudal direction and 0.44cm in anteroposterior direction showing the maximum range of the movement was seen in the A-P direction. Majority of the fractions were treated by PTV-III(48.85%) followed by PTV-II(26.26) and PTV-I(24.89%). Mean disease free survival and overall survival were found to be 17.56 months and 21.74 months. Only 1 patient developed grade III acute GI toxicity while no major acute GU toxicity was noted. No patient developed chronic GI or GU toxicity.

CONCLUSION: Inter-fractional variation in organ filling is inevitable despite fixed pretreatment protocol in definitive settings. Despite the logistical challenges, adaptive IGRT in the form of plan of the day based on incremental CTV-to-ITV margins is a relatively simple and feasible strategy to minimise geometric uncertainties and less toxicities in radical IG-IMRT of cervical cancer.

Title: An outcome analysis of glioma cases treated in a tertiary care facility: a retrospective study

Authors: Dr. Thomas Xavier Kidangan, Dr. Nirmala S, Dr. Avinash H.U., Dr. Hadrian Noel Alexander F, Dr. Jayalekshmi R, Mr. John Michael Raj. Department of Radiation Oncology, St John's Medical College and Hospital

Awarded 1st prize for best poster presentation under CNS category

Introduction:
Gliomas are the most common primary malignant brain tumors in adults, ranging from indolent low-grade tumors to aggressive glioblastomas. Despite advances in multimodality treatment, prognosis remains poor, particularly for high-grade gliomas. The 2021 WHO classification emphasizes integrated histo-molecular diagnosis, which has refined prognostication and treatment strategies. This study analyzes outcomes of glioma patients treated in our tertiary care center over a decade.

Methods :
We retrospectively analyzed 93 patients with histologically confirmed gliomas treated between 2014–2024. Clinical, radiological, histopathological, surgical, and therapeutic details were obtained from departmental records. Overall survival (OS) and progression-free survival (PFS) were calculated using the Kaplan–Meier method. Two patients lost to follow-up after treatment were excluded from survival analysis.

Results:
The median age was 44.8 (Inter Quartile Range: 34.5-58.5 years), with a male predominance (62.6%). Headache (51.6%) and seizures (34.1%) were the most common presentations, with the frontal lobe being the most frequent location (51.6%). Gross/near-total resection was achieved in 50.5 % of patients, while 22% underwent biopsy only. Glioblastoma was the most common histology (41.8%), followed by anaplastic astrocytoma and oligodendroglioma. Concurrent temozolomide was given to 82.4% and adjuvant temozolomide to 72.6%. At 6 months, 83.5% were alive; 5-year OS was 46.2%. Median OS was 26.4 months and median PFS was 11.3 months. Glioblastoma patients had a median 5 year OS of 9.9 months and median 5 year PFS was 6.4 months. Re-excision was performed in 8 patients, of whom 5 had progressed to glioblastoma.

Conclusion:
This retrospective analysis highlights the heterogeneity in presentation, treatment, and outcomes across the glioma spectrum. Glioblastoma, though the largest subgroup, carried the worst prognosis. Maximal safe resection and chemoradiation showed trends toward improved survival. Our findings are consistent with national and international reports, reinforcing the need for individualized multimodality care and molecular integration to optimize glioma management in the Indian context.

Title: Pain management and analgesic strategies in patients with Carcinoma uterine cervix undergoing Intracavitary or Interstitial Brachytherapy.

Authors: Dr. Sakshi Garg, Dr. Avinash H.U, Dr. Nirmala S, Dr. Hadrian Noel Alexander F, Dr. Jayalekshmi R, Mr. John Michael Raj, Dr. Deepu C Tom. Department of Radiation Oncology, St John's Medical College and Hospital

Introduction:
Pain management is a critical aspect of brachytherapy (BT) for carcinoma of the uterine cervix. While both intracavitary (ICBT) and interstitial (ISBT) approaches are essential in definitive treatment, pain intensity can vary based on technique, patient characteristics, and analgesic strategies. This study aims to evaluate pain severity and associated factors to guide optimal pain control.

Methods and materials:
This retrospective observational study included 85 patients with carcinoma of the uterine cervix who received external beam radiotherapy (EBRT) followed by BT between October 2022 and May 2025. EBRT (4500cGy in 25 fractions) was delivered with concurrent weekly cisplatin chemotherapy (CT), followed by BT (7 Gy × 4 fractions), using ICBT or ISBT. Pain was assessed during treatment using a numeric rating scale and categorized as mild (1–3), moderate (4–6), or severe (7–10). Analgesia was stratified into four regimens: paracetamol (PCT) alone, PCT and Non-Steroidal Anti-Inflammatory Drugs (NSAIDs), opioids, and fentanyl patient-controlled analgesia (PCA). Mode of anaesthesia and the drugs used was also analysed.

Results:
Of the 85 patients, 33 experienced mild pain, 33 moderate, and 19 severe pain. The median age was 53.2 years, with the severe pain group being significantly older ($p = 0.009$). Pain severity was significantly associated with brachytherapy technique ($p = 0.013$), with ISBT correlating with higher pain levels. While use of analgesics ($p = 0.078$) showed trends toward significance, anaesthesia type did not ($p = 0.21$). Severe pain group were more likely to be administered fentanyl and opioids.

Conclusion:
Multimodal analgesic strategies, including fentanyl infusions and opioids, are crucial in managing severe pain. Tailored pain management should be considered to improve patient comfort and compliance during cervical cancer treatment.

Title: Synchronous and Metachronous Cancers: Experience from a Tertiary Care Center

Authors: Dr. Sakshi Garg, Dr. Nirmala S, Dr. Avinash H.U, Dr. Hadrian Noel Alexander F, Dr. Jayalekshmi R Department of Radiation Oncology, St John's Medical College and Hospital

Introduction:
Multiple primary malignancies pose significant diagnostic and therapeutic challenges. Synchronous malignancies are defined as two or more primary tumors diagnosed simultaneously or within six months of each other whereas metachronous are diagnosed more than six months apart. Risk factors include tobacco, alcohol, genetic predisposition, and treatment-related effects. This study aimed to evaluate patterns, risk factors, management, and outcomes of multiple primary malignancies.

Methods and Materials:
This retrospective study analyzed 25 patients with synchronous or metachronous malignancies treated in our radiotherapy department. Data on demographics, addictions, tumor sites, stage, treatments, and outcomes were collected from medical records and summarized using descriptive statistics.

Results:
Among 25 patients, 15 (60%) had synchronous and 10 (40%) had metachronous malignancies. Tobacco use was common, especially in aerodigestive tumors, though 10 patients had no addictions. Most patients were treated with curative intent while one received palliative treatment. At last follow-up, 16 (64%) were alive, 5 (20%) had died, and 4 were lost to follow-up. One had loco-regional recurrence, while 2 developed distant metastases. Among metachronous cases, cancer intervals ranged from 9 months to 11 years. Two second cancers developed within prior irradiated fields and were curatively re-irradiated, based on treatment interval (>5 years), prior plans, and cumulative dose received by organs at risk. Other examples included breast–endometrium/cervix and lip–buccal mucosa cancers with shared etiologies. Among synchronous cases, second malignancies were often detected during staging workup. Treatment was varied according to the site. Despite dual malignancies, curative intent was achievable, with survival ranging from 5 months to 4 years; eight patients remain alive at last follow-up (1–10 years).

Conclusion:
Dual malignancies are often managed with curative intent and yield favorable outcomes. Shared risk factors necessitate thorough evaluation. In metachronous cases, curative re-irradiation remains a feasible option. This study underscores the importance of integrated multimodal treatment approaches.

Title: From Induction to Impact - NACT in Head and neck cancers - A Radiation oncologist perspective

Authors: Dr Soundarya V, Dr Janaki M G, Dr Arul Ponni T R, Dr Mohan Kumar S, Dr Lithika Lavanya M, Dr Priyanka G S, Dept of Radiation Oncology, M S Ramaiah medical college hospital.

Background:
Locally advanced head and neck squamous cell carcinoma (LA-HNSCC) often presents with bulky disease, limiting the efficacy of definitive chemoradiation. Neoadjuvant chemotherapy (NACT) is employed to achieve cytoreduction, potentially improving radiation effectiveness and organ preservation. Tumor volume regression is an objective measure to assess the impact of NACT prior to concurrent chemoradiation (CTRT). NACT as compared to CTRT alone to bulky advanced HNC cancers helps in reducing dose to critical OARS. This study is conducted to compare volume reduction with NACT followed by Concurrent CTRT v/s Concurrent CTRT in LA-HNSCC along with toxicity profile comparison.

Methods and Materials:
This is a retrospective observational case series conducted on 16 patients with LA-HNSCC treated with either 2–3 cycles of NACT followed by radical CTRT or only Radical CTRT. Gross tumor volume (GTV) was contoured on contrast-enhanced CT scans pre and post-NACT and 6 weeks post treatment for NACT arm and RT simulation scan and 6 weeks post radical CTRT for CTRT arm. Percentage volume regression was calculated and compared using unpaired t-test. The impact of volumetric reduction on radiation planning parameters and acute response to CTRT was analyzed.

Results :
NACT → CTRT: mean reduction (cc) 28.96 → 5.88(p = 0.0068). (Pre NACT to before CTRT - 27% reduction).CTRT alone: mean reduction (cc) 35.96 → 8.01 (p = 0.00023)
Nodal volumes: Significant in CTRT alone in cc (15.35 → 2.52, p = 0.014)(Pre NACT to before CTRT - 24% reduction). Trend toward significance in NACT → CTRT in cc (24.30 → 5.20, p = 0.058)
Dermatitis: Mostly Grade 2 in both arms. Grade 3 dermatitis occurred in 2 patients in CTRT arm, none in NACT → CTRT arm Mucositis: Predominantly Grade 2 in both arms. Grade 3 mucositis was slightly higher in NACT → CTRT (2 patients) vs CTRT (1 patient). No Grade 4 toxicities were observed in either arm.

Conclusion :
Overall, both treatment modalities were effective in reducing tumor burden, with nodal response appearing slightly more pronounced in the CTRT-alone group. These findings suggest that both approaches are effective for locoregional control, with NACT contributing to early tumor regression but not significantly altering nodal response in this small cohort. At 6 weeks, both arms experienced predominantly Grade 2 dermatitis and mucositis. Grade 3 dermatitis was observed only in 2 patients in the CTRT arm, while Grade 3 mucositis was noted in 2 patients in the NACT → CTRT arm and 1 patient in the CTRT arm. No Grade 4 toxicities occurred, suggesting that both treatment approaches were generally well tolerated.

Title: Adaptive radiotherapy in carcinoma lung- A case report

Authors: Dr. Akash Girimallappa, Dr. Janaki M G, Dr. Arul Ponni , Dr. Mohan Kumar, Dr. Lithika Lavanya, Dr.Priyanka G S Dept of Radiation Oncology, M S Ramaiah Medical College, Bangalore

Purpose / objective:
To assess the advantage of adaptive radiotherapy over conventional radiotherapy in lung cancer by evaluating changes in tumor and organ geometry during the treatment course.

Materials and Methods:
76 years aged male with the history of cough since 3 months and hemoptysis since 15 days, Metabolically active soft tissue mass noted in left hilar region extending to left upper and lower lobes occluding left main bronchus, partially encasing left lower segmental pulmonary artery abutting left superior and inferior pulmonary veins, measuring 5.3 x 5.4 x 6cm. 1.3cm sized soft tissue nodule noted in right middle lobe. Metabolically active discrete prevascular, AP window, subcarinal, right hilar lymph nodes noted, largest measuring 2.9 x 3.8cm. HPE on 07/10/2024 was suggestive of Squamous cell carcinoma. Diagnosed as NSCLC Lung T4N3M1a. Patient received 6 cycles of paclitaxel + carboplatin. PET CT (24/3/25) showed Soft tissue mass in the left hilar region involving the left upper and lower lobes, oscluding the left main bronchus, leading to collapse. Consolidation of entire left lung. Lesion measures 6.0 x 5.6 × 5.1 cm. Internal complete obstruction of left lower lobe bronchus. Patient Was planned for salvage radiation with a dose of 60Gy/30# with IGRT technique. Vac loc cast was done with patient positioned in supine position. CECT was done for planning with 2.5mm cuts. GTV was contoured as per planning CT and after fusing the PET CT. 1cm margin was given to GTV to create PTV and trimmed from Aorta. PTV volume was 769.1cm. Daily CBCT was done for image verification. On subsequent imaging tumour volume regressed. Repeat scan was done post 17 fractions. GTV was contoured as per the new planning CT and 1cm margin was given to create PTV. And treated with 26Gy/13#. The new PTV volume was 290.8cm3 . There was significant reduction in PTV volume and the dose to OAR's

Results:
With the use of Adaptive radiotherapy, there was a significant reduction in the GTV Volume from 769.1cc to 303.9cc around 60%.

Conclusion:
Adaptive mid-treatment replanning should be considered in lung cancer RT for more accurate dose delivery, especially when appreciable reduction is noted on daily or weekly imaging. Significant changes in DVH can occur for normal structures as well as target volumes owing to anatomical changes during the course of treatment. Mid-treatment replanning has the potential to allow delivery of optimum target doses, while enabling better normal tissue sparing, hence creating the possibility of improved locoregional control and consequent survival benefits.considered in lung cancer RT for more accurate dose delivery, especially when appreciable reduction is noted on daily or weekly imaging. Significant changes in DVH can occur for normal structures as well as target volumes owing to anatomical changes during the course of treatment. Mid-treatment replanning has the potential to allow delivery of optimum target doses, while enabling better normal.

Title: Comparison of two different high-dose-rate interstitial brachytherapy eqd2 prescription schedules in treatment of cervical carcinoma

Authors: Dr. Yuvaraj. U, Dr.Arpitha , Dr. Geetha N, Department of Radiation Oncology, Vydehi Institute of Medical science & Research Centre.

Background:
Brachytherapy after external beam radiotherapy (EBRT) is standard of care for locally advanced cervical cancer, improving local control and survival. Image guided brachytherapy (IGBT) with CT/MRI enables accurate applicator placement and dose evaluation. However, discrepancies in high-dose-rate (HDR) brachytherapy fractionation persist. This study compared two HDR interstitial brachytherapy (ISBT) regimens with respect to tumor coverage and organ-at-risk (OAR) doses, referencing ICRU 89 and American Brachytherapy Society (ABS) guidelines (HRCTV-D90 ≥85 Gy EQD2, bladder ≤90 Gy EQD2, rectum ≤75 Gy EQD2).

Methods:
In this randomized study, 68 patients with locally advanced cervical cancer were assigned to two treatment arms following EBRT with concurrent chemotherapy. Arm A received ISBT with 7.5 Gy × 3 fractions, and Arm B received 6 Gy × 4 fractions, prescribed to the high-risk clinical target volume (HRCTV). CT-based planning was performed for all patients. Dosimetric endpoints included HRCTV D90, HRCTV-D100, and OAR doses: bladder (D0.1cc, D2cc, D5cc), rectum (D0.1cc, D2cc), and sigmoid (D0.1cc, D2cc).

Results:
Arm A demonstrated significantly higher HRCTV-D100 (mean 4.16 vs. 3.46, p=0.001), bladder D5cc (3.69 vs. 2.90, p=0.001), bladder D0.1cc (6.38 vs. 5.61, p=0.001), sigmoid D0.1cc (2.65 vs. 2.09, p=0.04), and rectum D0.1cc (4.76 vs. 3.99, p=0.001) compared with Arm B. EQD2-HRCTV was marginally lower in Arm A (78.00 vs. 78.52, p=0.05). No significant differences were observed in bladder D2cc, rectum D2cc, sigmoid D2cc, or overall treatment time (OTT).

Conclusion:
Both regimens provided comparable tumor control. The 6 Gy × 4 regimen (Arm B) resulted in lower OAR doses without compromising efficacy, suggesting a more favourable toxicity profile. Long-term follow-up is warranted to establish the optimal HDR fractionation strategy.

T*itle: Intraoperative Electron Radiation Therapy for Recurrent Tumors: Safety, Feasibility, and Early Outcomes*

Authors: Suneetha N*, Ram Charith Alva, Vidya A.C, Ashwin K.R, Rohit Kumar C, Esha Shanbang, Belliappa M.S, Somashekhar S. P. Aster International Institute of Oncology, Aster Whitefield Hospital, Bangalore

Introduction:
Multi-modality treatment has been adopted for locally recurrent cancers amenable to complete surgical resection. To improve oncological outcomes, radiation and systemic therapy have been integrated, given the limited efficacy of surgery alone for recurrent tumours. IOeRT is a novel technique for delivering high dose while sparing doses to normal tissues. We tried to explore the feasibility IOeRT, assess acute toxicities and local control benefits in recurrent cases.

Materials and Method:
A total of 10 locally recurrent cases who were treated with IOeRT between August 2024 to August 2025 to different sites (Colorectum, Rectum, Retroperitoneal sarcoma, ovary and Head/Neck) were reviewed. After excision of the tumour, high risk tumour bed was delineated by the surgeon. Radiation dose was depended on the probability of residual disease (R1/R2). Applicator size and bevel were selected appropriately depending on the size and orientation of the tumour bed. Energy of electrons decided on the depth of the tissue to be irradiated. IOeRT machine was docked after placing applicators to tumour bed using a robotic arm and calculated (manual/TPS based) MU were delivered. All the patients were followed up for peri / post operative complications and for local control.

Results:
10 locally recurrent patients were treated with IOeRT. Out of which 8 of them had already received external beam radiotherapy. 4 of them were colorectal cases. 2 of them were ovarian cancer. 2 of them were retroperitoneal sarcoma and 2 were head /neck cancer. None of them had prolonged hospital stay due to post op complications like infection. There was no peri operative mortality. Post Operatively histopathology co-relation revealed high risk features for most of the patients including positive margins. Median follow up is 3.5 months(2-12months). At the time of last follow up (August 2025), 2 head and neck cases progressed regionally (intracranial and contralateral neck which were outside irradiated field). 1 ca ovary patient progressed in distant site (lung). 8 of them have good local control till date despite majority being positive margin.

Conclusion:
IOeRT is a safe and feasible option for locally recurrent malignancies and as an option for reirradiation, with no perioperative mortality and minimal complications. IOeRT has demonstrated encouraging results in isolated, small-volume recurrences. At short-term follow-up, 80% of the patients had good local control, supporting its role as an effective component of multimodal therapy, although long term follow up with larger sample size is required

Title: Peripheral T-Cell Lymphoma Treated with Total Skin Electron Therapy: A Case report.

Authors: Dr. Akash Girimallappa, Dr. Janaki M G, Dr. Arul Ponni ,Dr. Mohan Kumar, Dr. Lithika Lavanya, Dr.Priyanka G S, Dept of Radiation Oncology, M S Ramaiah Medical College, Bangalore

Purpose / objective:
To describe the clinical outcome and technical execution of TSET using the Stanford technique in a patient with PTCL-NOS and extensive cutaneous involvement.

Materials and Method:
Patient was evaluated for swelling in the neck region and generalised itching since 2 years→ Underwent Left cervical LN biopsy and IHC on (25/7/22) which was s/o peripheral T-cell Lymphoma NOS. CD30, CD3, CD4, CD5(+) Ki67-70%. PETCT (20/7/22) shows b/l level II-V cervical LN, axillary, lower RPLN, external iliac and inguinal LN→ s/p 8 cycles of CHOP, s/p VECP 6 sessions, s/p 12 cycles of Bortezomib, s/p 2 cycles BV; on Tab. Lenolidomide and Inj bortezomib. Had persistent generalised itching and was referred to radiation oncology. On examination at presentation - ECOG- 1 , there were plaques of varying size seen all over the body. Patient was planned for TSEBT 36Gy/18Fractions 2 cycles in a week (2 fraction/week) to whole skin and 24Gy/12fractions (2Gy per fraction) boost to perineum and sole of feet with energy of 6Mev High dose rate model.Nail shield thickness of 0.5mm (Made sure to cover nail bed) used. Lead goggles with additional 2mm lead shielding used for eye shielding.Over all treatment time was 66 days.Stanford technique (6 dual field technique) was used for treatment.The patient tolerated the treatment reasonably well, with grade 1 radiation dermatitis and grade 2 nail reaction according to RTOG grading system. He was treated with antibiotics and analgesics. Blood parameters were checked on a weekly basis and after every cycle to look for any hematological derangement. He had a near total response in itching.

Results :
Treatment was completed over 66 days with only grade 1 radiation dermatitis and grade 2 nail toxicity, both self-limiting, and resulted in near-complete relief of pruritus and marked regression of plaques, with sustained symptomatic control at 1-month follow-up.

Conclusion:
TSET using the Stanford technique is feasible and effective for symptomatic control of cutaneous PTCL, providing meaningful palliation with acceptable toxicity despite its technical complexity

Title: Impact of Deep Inspiration Breath-Hold on Cardiac Doses in Left-Sided Breast Cancer Irradiation

Author: Dr Varun , Dr. Janaki M G, Dr. Arul Ponni ,Dr. Mohan Kumar, Dr. Lithika, Dept of Radiation Oncology, M S Ramaiah Medical College, Bangalore.

Background:
To compare the dose received by Left Anterior Descending Artery(LAD) and Heart with and without DIBH technique. To compare LAD Dmean and Heart D50 between DIBH and free breathing.

Materials and Methods:
This was a retrospective, hospital-based dosimetric study involving five patients with left-sided breast cancer who underwent Breast Conservation Surgery (BCS) and subsequent adjuvant radiotherapy utilizing the Deep Inspiration Breath Hold (DIBH) technique. Patient Simulation and Planning
1. At the time of simulation, two distinct Computed Tomography (CT) datasets were acquired for each patient: one under Free Breathing (FB) and one under Deep Inspiration Breath Hold (DIBH) conditions.
2. Treatment Plan: The DIBH CT dataset was used to generate the definitive treatment plan. 3. Comparative Plan: A complementary plan was retrospectively created on the FB CT dataset, using identical beam arrangements and parameters, to serve as the control group for comparative dosimetric analysis against the DIBH plan. Organ-at-Risk Delineation:Left Anterior Descending (LAD) coronary artery region was contoured. Given the lack of contrast-enhanced imaging typically required for precise vessel delineation, the anterior interventricular groove was utilized as a surrogate region for the LAD.

Results and Conclusion

Analysis of 5 patients receiving a dose of 40Gy/15Fr reveals significant dosimetric differences between Free Breath (FB) and Deep Inspiration Breath Hold (DIBH) techniques:

- LAD Sparing: The DIBH technique demonstrated a substantial reduction in the mean dose to the Left Anterior Descending (LAD) artery across all patients compared to Free Breath by 33.7%.(p value <0.001)
- Heart Sparing: The Heart D50 (dose to 50% of the volume) was consistently lower using the DIBH technique.(p value <0.01)
- Left Lung V20: A marginal increase in the V20 (volume receiving 20Gy) of the Left Lung was observed in the DIBH group compared to the Free Breath group.

Title : Intraoperative Electron Radiation Therapy Boost in the Treatment of Primary Breast Cancer - Single Institution Experience from India.

Author: Suneetha N*, Ram Charith Alva, Vidya A.C, Ashwin K.R, Rohit Kumar C, Karthikeyan S, Surendhiran M, Susmita Rakshit, Ramachandra K, Pugazhenthi M, Nikhil S Reddy, Nashi Semitha, Sadashiva Hegde, Belliappa M.S, Somashekhar S. P- Aster International Institute of Oncology, Aster Whitefield Hospital, Bangalore, India.

Abstract presented in FARO 2025

Objective:
Intraoperative Electron Radiation Therapy (IOeRT) boost to tumour bed in breast cancer can improve local control and cosmesis. This study aims to evaluate the acute toxicities and early late toxicities in patients who received tumour bed boost by IOeRT.

Methods:
Single institution prospective observation study from August 2024 to February 2025. All the patients undergoing Breast Conservation Therapy who received IOeRT tumour bed boost were analyzed. Pregnant women, previous breast / chest irradiation were excluded. After wide local excision of the lump, negative margins were confirmed by frozen section. IOeRT boost to a dose of 9-10Gy was delivered to tumour bed followed by whole breast irradiation. Immediate post operative complications, acute and early late toxicities were assessed.

Results:
A total of 41 patients with median age of 56years (range 25-83) received IOeRT tumour bed boost were analyzed. Median follow up was 5 months (3 – 10 months). Mean tumour bed depth was 2.09cm. On correlation of post op 'T' size with applicator size, all cases received adequate coverage with a minimum margin of 2cm. 2 patients had post op wound infection. Both of them received neoadjuvant chemotherapy. One among them was diabetic. Other one had drain site infection which led to prolonged seroma accumulation. Otherwise, none of the patients required seroma drainage. Physician assessed acute and early late toxicities were assessed and documented as per CTCAE V5. None of the patients had visible skin reaction as acute and early late toxicity (Erythema, Telengectasia, hypertrophic scar). A total of 31(75.6%) patients had grade I and II acute subcutaneous fibrosis. Only 6 patients had grade III fibrosis. All patients received EBRT to whole breast after IOeRT within a median period of 4.2 weeks to an equivalent dose of 40Gy/15#. 40 patients were analyzed for early late toxicity. 34 patients (85%) had less than or equal to Grade II fibrosis. Only 6 (15%) patients had grade III fibrosis. All the patients are disease free at the time of last follow up. There was no significant correlation between the size of applicator / energy of electron to grade III fibrosis.

Conclusion:
Intraoperative electron radiotherapy (IOeRT) boost can be safely administered to breast carcinoma patients undergoing breast-conserving therapy, demonstrating a favorable toxicity profile. However, longer follow-up and studies with larger patient cohorts are needed for robust validation.

Title: Outcomes of Active Breathing Coordinator (ABC) Breath Hold-Based Stereotactic Body Radiotherapy for Hepatocellular Carcinoma from a Tertiary Cancer Centre in India.

Dr Shirley Lewis Salins- Professor and Head KMC Manipal

Purpose: Stereotactic body radiotherapy is a significant armamentarium for localised HCC. We present the outcomes of HCC treated with Active Breathing Coordinator (ABC) Breath Hold-Based SBRT.

Methods: This is a retrospective study of HCC patients with BCLC 0-C, Child-Pugh A5-B7, who were treated with SBRT between July 2018 and July 2024. Patients eligible for SBRT after tumour board discussion were simulated and treated with ABC breath hold-based SBRT. The total dose ranged from 27.5 Gy to 50Gy in 5 fractions.

Results: 130 cases of HCC were assessed for SBRT suitability, and 46 were found suitable and treated with SBRT. The cohort's mean age was 59 (26-78). The mean serum AFP was 4878 (2.7-6500). DIBH was the most common motion management strategy (90%). The majority of patients were BCLC A (43.5%) or B (41%), while only 7 patients were BCLC C. Over 75% were Child A5 at presentation. The local control of the lesions was 93% at a median follow-up of 22 months. All patients tolerated SBRT with minimal fatigue and nausea. At three months, five patients (12.8%) developed liver toxicity with Child-Pugh score elevation >/= 2 points. The baseline HIDA scan was performed in 11 patients. The mean total functional liver volume (FLV) was 9.31 %/minute, and the future liver remnant (FLR) was 64%. The pre and post-HIDA scans were available in 2 patients There was a decline in the functional liver volume in both patients, with one reducing below a critical value with transient grade 2 toxicity. Only a Post-treatment HIDA scan was available in 2 patients. Both patients were disease-free for over 1 year and FLV 6.3 and 10.1, respectively.

Conclusion: SBRT is a non-invasive modality with local control rates of over 90%. Functional volume assessment in assessing post-SBRT toxicity needs to be evaluated in prospectively.

Table 1 shows Pre and Post HIDA parameters in 2 patients treated with SBRT.
FLV (Functional liver volume) and FLR- Functional liver remnant.

Patient	HIDA parameter	Pre - SBRT	Post SBRT	Change	Toxicity
1	FLV FLR	10.35 89%	7.18 84%	3.17 5%	NIL
2	FLV FLR	5.48 89%	2.89 66%	2.59 23%	YES

" ನನ್ನನು ಬಿಟ್ಟು ಬಿಡಿ, ಪ್ಲೀಸ್ "

ಆಸ್ಪತ್ರೆ ಒಳಗೆ ಬರುತ್ತಿದ್ದಂತೆ ಎಂಟು ವರ್ಷದ ಮನು (ಹೆಸರು ಬದಲಾಯಿಸಿದೆ) ಸಿಕ್ಕ. ಮುಖದಲ್ಲಿ ಖುಷಿಯ ನಗು ತುಂಬಿಕೊಂಡ್ಡಿದ್ದ. ಆತ್ಮೀಯವಾಗಿ ಜೊತೆಗೆ ನಡೆಯುತ್ತಾ ಓಪಿಡಿ ಕಡೆ ಬಂದ, ಚೆನ್ನಾಗ್ ಇದ್ದೀನಿ ಸಾರ್ ಈಗೇನು ಸಮಸ್ಯೆ ಇಲ್ಲ ,ಚಿಕನ್ ಸಾರು ಮುದ್ದೆ ತಿಂದಿದೀನೀ ಎಂದ,ಈಗ್ಗೆ ಮೂರು ತಿಂಗಳ ಹಿಂದೆ ಅವನಿಗೆ ಮೂಗಿನ ಹಿಂಭಾದ ನೆಸೊ ಫೆರಿಂಜೆಎಲ್ ಕ್ಯಾನ್ಸರ್ ಆಗಿ ಅದಕ್ಕೆ ರೇಡಿಯೇಶನ್ ಮತ್ತು ಕಿಮೋಥೆರಪಿ ಮುಗಿಸಿ ,ಚೇತರಿಸಿಕೊಂಡಿದ್ದ.

ವೈದ್ಯನಾಗಿ ತುಂಬಾ ತೃಪ್ತಿ ಆಗೋ ಸಮಯ ಅದು ,ನನ್ನ ಬುದ್ದಿವಂತಿಕೆಗೆ ಬೆನ್ನು ತಟ್ಟಿಕೊಂಡು ಅಪಾಯಿಂಟ್ಮೆಂಟ್ ಲಿಸ್ಟ್ ನ ಮುಂದಿನ ಪೇಷಂಟ್ ಕರೆದೆ !

ಅಪ್ಪ ಬೇಗ ಬನ್ನಿ ಒಳಗೆ ಹೆಜ್ಜೆ ಹಾಕಿ, ಕೂತ್ಕೋಳಿ, ನೀವೇ ಹೇಳಿ ಡಾಕ್ಟರ್ ಇವರಿಗೆ ಟ್ರೀಟ್ಮೆಂಟ್ ಬೇಡ ಅಂತಿದ್ದಾರೆ ,ಎಷ್ಟು ಅಂತ ಹೇಳೋದು ಅರ್ಥಾನೇ ಆಗೋಲ್ಲ ಅಂತ ರೋಗಿಯ ಮಗಳು ಬಡಬಡಿಸಿದಳು !

ರಾಮಣ್ಣ (ಹೆಸರು ಬದಲಾಯಿಸಿದೆ) ಇಳಿ ವಯಸಿನಲ್ಲಿ ಅಂಗುಳದ ಕ್ಯಾನ್ಸರ್ ಗೆ, ರೇಡಿಯೇಶನ್. ಕಿಮೋಥೆರಪಿ ತಗೆದುಕೊಳ್ಳುತ್ತಿದ್ದರು,ರಾಮಣ್ಣ ಹಾಗೆಲ್ಲ ಹೇಳಿದರೆ ಕಾಯಿಲೆ ವಾಸಿ ಆಗುದಿಲ್ಲ, ನೋವಿದೆಯೇ ಮಾತ್ರೆ ಬದಲಾಯಿಸೋಣ ಅಂತ ಪ್ರಿಸ್ಕ್ರಿಪ್ಷನ್ ಪ್ಯಾಡ್ ಕೈಗೆತ್ತಿಕೊಂಡೆ ,ಮಗಳು ಇನ್ನೇನೋ ಹೇಳುವಷ್ಟರಲ್ಲಿ ರಾಮಣ್ಣ ಸನ್ನೆ ಮಾಡಿ ಸುಮ್ಮನಿರಲು ಹೇಳಿ ,ಬರೆದು ತಂದಿದ್ದ ಚೀಟಿ ನಂಗೆ ಕೊಟ್ಟರು !

ಇದುವರೆಗೂ ಬೀಗಿ ಉಬ್ಬಿದ್ದ ಎದೆ ಒಮ್ಮೆಲೇ ಗಾಳಿ ತಗೆದೆ ಬಲೂನ್ ಅಂತೆ ಆಯಿತು !ಓದಿದ್ದ ಎಲ್ಲ ಪುಸ್ತಕ ಒಮ್ಮೆಲೇ ಮುಚ್ಚಿ ಹೋದವು, " ನನ್ನನು ಬಿಟ್ಟು ಬಿಡಿ ,ಪ್ಲೀಸ್ " ಎಂದು ಬರೆದಿದ್ದ ಸಣ್ಣ ಚೀಟಿ ಮನಸ್ಸಿನ ಮೂಲೆಗೆ ಇರಿದಂತಾಯ್ತು.
ಇಳಿ ವಯಸ್ಸಿಗೆ ಬಂದಿದ್ದ ಕ್ಯಾನ್ಸರ್ ಕಾಯಿಲೆ ರಾಮಣ್ಣ ನನ್ನ ಜರ್ಜರಿತರನ್ನಾಗಿ ಮಾಡಿತ್ತು ,ಟ್ರೀಟ್ಮೆಂಟ್ ನ ಅಡ್ಡ ಪರಿಣಾಮಗಳು ಇನ್ನಷ್ಟು ಬಾಧಿಸಿತ್ತು ಜೊತೆಗೆ ಮನೆಯವರಿಗೆ ಈ ವಯಸಿನಲ್ಲಿ ಹೊರೆಯಾದೆ ಅನ್ನೋ ಭಾವ ಎಲ್ಲವೂ ಸೇರಿ ಖಿನ್ನತೆ ಇರಬೇಕು\, ಒಮ್ಮೆ ಸಮಾಲೋಚನೆ ಮಾಡಿ ಚಿಕಿತ್ಸೆ ಮುಂದುವರಿಸುವ ಅನ್ನಿಸಿತು. ಈ ತರದ ಎಷ್ಟೋ ಸನ್ನಿವೇಶಗಳು ಮುಂಚೆಯೂ ಬಂದಿದ್ದು ಆಪ್ತ ಸಮಾಲೋಚನೆ ಎಷ್ಟೋ ಬಾರಿ ಸಹಾಯ ಆಗಿದ್ದುಂಟು.

ವಿಜ್ಞಾನ ತಂತ್ರಜ್ಞಾನ ಬೆಳೆದಂತೆ ಕ್ಯಾನ್ಸರ್ ಖಾಯಿಲೆ ಪತ್ತೆಹಚ್ಚುವ ರೀತಿ ,ಅದಕ್ಕೆ ಚಿಕಿತ್ಸೆ ಎಲ್ಲವೂ ವೈದ್ಯನಾಗಿ ನನಗೆ ಮತ್ತು ನನ್ನಂತ ಎಷ್ಟೋ ಕ್ಯಾನ್ಸರ್ ವೈದ್ಯರಿಗೆ ಖುಷಿಕೊಡುವ ವಿಚಾರ ,ಆದರೆ ಅದನ್ನ ಎಲ್ಲ ಸಮಯದಲ್ಲೂ ಬರಿ ವಿಜ್ಞಾನದ ದೃಷ್ಟಿ ಇಂದ ನೋಡುವುದು ಎಷ್ಟು ಸರಿ !!

ಚಿಕಿತ್ಸೆ ನೀಡೋ ಬರದಲ್ಲಿ ರೋಗಿಗೆ ಬೇಕಾದ್ದು ಏನು ಅನ್ನೋದು ತುಂಬಾ ಮುಖ್ಯ ಅನ್ನಿಸಿತು ,ವೈದ್ಯನಾಗಿ ನಾನು ಈ ಮಾತ್ರೆಗೆ ಕಮ್ಮಿ ಆಗಿಲ್ವ ಹಾಗಿದ್ರೆ ಇದನ್ನು ತಗೋಳಿ ,ಕಿಮೋ ರೇಡಿಯೇಶನ್ ಇಂದ ಅಡ್ಡಪರಿಣಾಮವೇ ಹಾಗಿದ್ರೆ ಡೋಸ್ ಕಡಿಮೆ ಮಾಡಿ ನೋಡುವ, ಇದಲ್ಲದಿದ್ದರೆ ಇದು, ಮತ್ತದು!! ತಂದೆ ಮೇಲಿನ ಪ್ರೀತಿಗೆ, ಇಲ್ಲ ಕರ್ತವ್ಯ ದೃಷ್ಟಿಯಿಂದ ಮಗಳು ಏನಾದರೂ ಸರಿ ಚಿಕಿತ್ಸೆ ಕೊಡಿ ಅನ್ನೋ ಬರದಲ್ಲಿ ರೋಗಿಯ ಧ್ವನಿ ಕೇಳಿಸದಂತಾಗಿತ್ತು !!

ನನ್ನ ಬುದ್ದಿವಂತಿಕೆ ,ಡಿಗ್ರಿಗಳು ,ಅನುಭವ ,ರಾಮಣ್ಣನ ಮಗಳ ಪಿತೃ ಪ್ರೇಮ ಎಲ್ಲದಕ್ಕಿಂತ ರಾಮಣ್ಣನ ಆಯ್ಕೆ ಮೇಲು ಅನ್ನಿಸಿತು, ಬರೆಯಲು ಕೈಗೆತ್ತಿಕೊಂಡ ಪೆನ್ನ್ ಕೆಳಗಿಟ್ಟೆ, ರಾಮಣ್ಣ ಕೇಳಿದಂತೆ ಪ್ಯಾಲಿಯೇಟಿವ್ ಕೇರ್ ಅಂದರೇನು ಅಂತ ತಿಳಿಸಿ ಹೇಳಿದೆ,ಅವರು ಬರೆದು ತಂದಿದ್ದ ಚೀಟಿಯನ್ನು ಭದ್ರವಾಗಿ ಮೇಜಿನ ಡ್ರಾಯರ್ ಒಳಗೆ ಇಟ್ಟುಕೊಂಡೆ, ನಾಳೆ ಮತ್ತದೇ ಸನ್ನಿವೇಶ ಬಂದಾಗ ಆ ಚೀಟಿ ನೆನಪಾದೀತು ಅಂತ !

Dr Vinayakumar Muttagi
MBBS,DMRT,DNB (Radiation Oncology)
Consultant,Dept of Radiation Oncology
Bharath Hospital & Institute of Oncology,
Mysore

PHASER – Pluridirectional high-energy agile scanning electron radiotherapy – which can transmit highly targeted doses of radiation in just a fraction of a second.

the team invented a technology that can shape the intensity of each beam electronically, rather than relying on slower motorized parts. Together, these strategies can combine to deliver the same amount of radiation as current treatment machines in about a 500-fold shorter time.

A novel patient positioning system that supports and stabilizes patients to be treated in the upright position (from seated to nearly standing), which has certain advantages compared to the traditional supine (IMAGE)

The new face of cancer in India: What top oncologists say we are getting wrong

India faces a worrying rise in cancer cases. Doctors Gopal Sharma and Rakesh Kumar Agarwal explain pollution, diet, obesity, and delayed diagnosis are key drivers.

They emphasize early detection and accessible healthcare. Integrating traditional medicine with modern oncology offers a path to better patient compliance and holistic care. Collective action is vital to combat cancer.

India's cancer fight needs a three-pronged approach, awareness, accessibility, and accountability. From curbing air pollution and promoting early screenings to reforming healthcare access and embracing preventive lifestyles, every step counts.

A Double-Blinded Placebo-Controlled Biomarker Stratified Randomized Trial of Apalutamide (APA) and Radiotherapy for Recurrent Prostate Cancer (NRG GU006, BALANCE trial)

Purpose/Objective(s):
Currently there are no prospectively validated predictive biomarkers to guide use of hormonal therapy in prostate cancer. NRG GU006, a phase II biomarker stratified randomized trial of patients receiving salvage radiotherapy (SRT) with or without APA, was designed with the hypothesis that transcriptionally defined molecular subtypes would differentially benefit from APA.

Materials/Methods:
Patients were enrolled between 4/2018-2/2020 and were required to be status post-radical prostatectomy with a PSA 0.1-1.0 ng/mL without evidence of nodal or distant metastasis and randomized to SRT with placebo or APA 240 mg daily for 6 months. Patients were stratified by PAM50 molecular subtype (luminal B vs non-luminal-B). The primary endpoint was biochemical progression-free survival (bPFS), defined as first occurrence of biochemical, local, regional, distant recurrence, or death from any cause. Key secondary endpoints reported are metastasis-free survival (MFS) and adverse events. The design and analysis involved first testing efficacy within the luminal B subtype (hypothesized to show greater benefit), followed by evaluation of the non-luminal-B group. If the lower limit of the 80% confidence interval (CI) for the hazard ratio (HR [APA/placebo]) in the latter group was >0.77, lack of efficacy in this subgroup would be declared.

Results:
A total of 295 eligible patients were enrolled with a median follow-up of 5.0 years. Arms were well balanced, with a median age of 65 years, 50% with positive surgical margins, 51% with pathologic T3 disease, 86% with entry PSA of <0.5 ng/mL; 19% were grade group 4-5, and 43% were luminal B. In luminal B patients APA significantly improved bPFS (HR 0.45, 80%CI 0.29-0.68, one-sided p=0.0062), with 5-year estimated bPFS of 72.4% vs 53.9% in the APA and placebo arms, respectively. In contrast, non-luminal B patients did not demonstrate improvement in bPFS (HR 0.95, 80%CI 0.65-1.41, p=0.44), with 5-year estimated bPFS of 70.2% vs 71.1%, although the lower CI limit was <0.77. MFS was also improved with APA in luminal B patients, HR 0.27, 95%CI 0.07-0.95, p=0.029; 5-year estimates of 94.7% vs 81.8%, but not in non-luminal B patients, HR 1.06, 95%CI 0.41-2.78, p=0.90; 5-year estimates of 89.9% vs 89.3%. In the APA vs placebo arm (regardless of attribution), grade 3+ gastrointestinal toxicity occurred in 5.7% vs 2.6%, and genitourinary toxicity in 3.5% vs 4.5%, respectively. In the APA arm, grade 3+ rash occurred in 5.0% of patients and breast pain in 0.7%.

Conclusion:
Patients with transcriptionally defined luminal B tumors derived improvement in clinically meaningful endpoints from the addition of APA to SRT. PAM50 represents the first prospectively validated predictive biomarker for hormone therapy in prostate cancer in a randomized trial.

upcoming conferences

YROC 2026

YOUNG RADIATION ONCOLOGISTS CONFERENCE 2026 | BENGALURU

YOUNG RADIATION ONCOLOGISTS CONFERENCE

DATE
24 - 25, Jan 2026

NIMHANS CONVENTION CENTRE
HOSUR MAIN ROAD, LAKKASANDRA, HOMBEGOWDA NAGAR, BENGALURU, KARNATAKA 560029

Greetings from Namma Bengaluru!

It is with great pleasure that **we welcome you to the Young Radiation Oncologists Conference (YROC-2026),** proudly organized by the Department of Radiation Oncology, Kidwai Memorial Institute of Oncology, Bengaluru, in association with the Association of Radiation Oncologists of Karnataka.

Warm Regards,
Organizing Committee
YROC 2026

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ESTRO

4th AROI ESTRO
Head and Neck Teaching Course

SAVE THE DATE

4TH - 6TH JUNE 2026

Theme : Oral Cavity Cancers & Head Neck Rehabilitation

Venue : Lecturer Theatre Complex, SGPGIMS

Organized by

Department of Radiotherapy,

Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, INDIA

COURSE HIGHLIGHTS

- Didactic lectures by eminent faculty from AROI & ESTRO
- Evidence Based Management & recent updates
- Interactive contouring & live treatment planning sessions
- Target audience : Radiation Oncologists & Medical Physicists
- AROI membership mandatory for Radiation Oncologist, India
- Registration Limited to 100 delegates

Course Registration Fee*	Clinician / Medical Physicist	Team (Clinician + Medical Physicist)
Indian Delegates	INR 12000	INR 18000
Foreign Delegates	USD 450	USD 800
Residents	INR 10000	-

* No spot registration will be provided

It is mandatory to fill and send transaction details in the given link : https://forms.gle/6RMBYKCTZcczbkQ37

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Bank Name: STATE BANK OF INDIA,

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IFSC Code: SBIN0007789 SWIFT Code :SBININBB500

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For Enquiries contact :

Department of Radiotherapy, Regional Cancer Center,
Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGIMS),
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E-mail : lkohn2026@gmail.com Mobile : 9335904587/ 8903139874

Endorsed by ESTRO

9th AROI
Teaching Course on Gynaecological Cancer Endorsed by ESTRO

savethedate

26th to 29th March 2026

Organised by:
Homi Bhabha Cancer Hospital & Research Centre,
New Chandigarh, Punjab, India

AROI Course Director:
Dr. Supriya Chopra,
Radiation Oncologist, Tata Memorial Centre, Navi Mumbai (IN)

ESTRO Course Directors:
Dr. Remi Nout,
Radiation Oncologist, Erasmus University Medical Centre, Rotterdam (NL)
Dr. Kari Tanderup,
Medical Physicist, University Hospital, Aarhus (DK)

Course Aim:
- *Concepts of Adaptive MRI/CT based Brachytherapy Contouring*
- *Composite Intracavitary-Interstitial Brachytherapy Treatment Planning*
- *Risk-based IG-IMRT target selection & Automated IG-IMRT model building*
- *Personalised Response Adapted Dose Prescription for locally advanced cervical cancer*
- *Advanced Image Guided Radiotherapy*
- *Re-irradiation*
- *Updates on the Molecular Classification of Endometrial Cancer and its Practical Applications*

Highlights:
- *Pre-conference homework*
- *Didactic lectures by eminent faculty from AROI & ESTRO*
- *Hands-on contouring and treatment planning workshops*

Target Group:
- *Radiation Oncologists & Medical Physicists*
- *Beginner & Advanced Track Participants*

AROI Office Bearers:
Dr. Manoj Gupta *Chair*
Dr. Surendra Nath Senapati *President*
Dr. C.S Madhu *President Elect*
Dr. V. Srinivasan *Secretary General*

Organising Team:
Dr. Ashish Gulia *Director HBCH & RC, Punjab Chairperson*
Dr. Tapas Kumar Dora *OIC, Dept of Radiation Oncology Secretary*

Endorsed by ESTRO

9th AROI
Teaching Course on Gynaecological Cancer Endorsed by ESTRO

Registration

EARLY BIRD REGISTRATION (1ST SEPTEMBER 2025 - 30TH NOVEMBER 2025)

REGISTRATION	INDIAN DELEGATES		FOREIGN DELEGATES	
CATEGORY (inclusive GST 18%)	AROI MEMEBERS	NON-AROI MEMEBERS	USD	INR @89
PHYSICIAN	INR 12,000	*INR 14,000	250	22,250
PHYSICIST	INR 10,000	INR 12,000	250	22,250
TEAM (physician & Physicist)	INR 18,000	INR 20,000	400	35,600

REGISTRATION AFTER 1ST DECEMBER 2025

REGISTRATION	INDIAN DELEGATES		FOREIGN DELEGATES	
CATEGORY (inclusive GST 18%)	AROI MEMEBERS	NON-AROI MEMEBERS	USD	INR @90
PHYSICIAN	INR 14,000	*INR 16,000	270	24,300
PHYSICIST	INR 12,000	INR 14,000	270	24,300
TEAM (physician & Physicist)	INR 22,000	INR 24,000	420	37,800

*AROI MEMBERSHIP IS MANDATORY FOR INDIAN RADIATION ONCOLOGISTS

Click Here To Register

Applications are now open for the NASBS Travel Scholarship Program!

Designed to promote international collaboration, education, and hands-on training in skull base surgery, the program offers financial support to attend the NASBS Annual Meeting. Recipients will also have the unique opportunity to take part in a one-week observership at a participating institution.

International Travel Scholarship - Open to junior faculty outside of North America.

- $2,000 travel stipend
- Complimentary registration for the Annual Meeting
- One-week observership at a NASBS member institution

Fred Gentili International Travel Scholarship - Open to residents and trainees outside of North America pursuing neurosciences and skull base pathology.

- $3,000 travel stipend
- Complimentary registration for the Annual Meeting
- One-week observership at a NASBS member institution

North American Travel Scholarship - Open junior faculty (less than 5 years in practice) in the USA, Canada, or Mexico.

- US $1,000 travel stipend
- Complimentary registration for the Annual Meeting
- One-week observership at a NASBS member institution
- NASBS membership required to apply.

Taj Fisherman's Cove, Chennai, Tamil Nadu, India.

SAVE THE DATE FOR ASTRO'S 68TH ANNUAL MEETING

Meeting Dates: September 26-30, 2026
Exhibit Dates: September 27-29, 2026
Boston | Livestream | onDemand

NEW MEMBERS

Student Members	LM Number
Dr. Anupam T O	KS/2025-TPGR-0028
Dr. Delphy Rai	KS/2025-TPGR-0029
Dr.Anoushka Taneja	KS/2025-TPGR-0030
Dr. Salma Shams	KS/2025-TPGR-0031
Dr.Urvashi	KS/2025-TPGR-0032
Dr. Pranav p	KS/2025-TPGR-0033
Dr. Jameema	KS/2025-TPGR-0034
Dr. Manvi Pankaj	KS/2025-TPGR-0035
Dr.Rekha N R	KS/2025-TPGR-0036
Dr Deeksha Dharini	KS/2025-TPGR-0037
Dr.Santra Mary Jose	KS/2025-TPGR-0038
Dr.Rahul Thiruganan	KS/2025-TPGR-0039
Dr. Nireeksha	KS/2025-TPGR-0040
Dr. Gideon	KS/2025-TPGR-0041
Dr. R Sahana	KS/2025-TPGR-0042

LIST OF PAST AROK OFFICE BEARERS

Year	President	Vice president	Secretary	Joint secretary	Treasurer	Editor	Executive committee
1996-1999	Dr. Shankar Raj	Dr. B S Ramesh	Dr. Prithviraj Paul	Dr. Nalini Rao	Dr. B K M Reddy	-	-
1999-2006	Dr. B K M Reddy	Dr. Vidyasagar Dr. Nirmala S	Dr. Kumara swamy	Dr. Belliappa M S	Dr.V Lokesh	-	Dr. Viswanath, Dr.Dinesh Kasthuri Dr. B S Ramesh Dr. G V Giri Dr.Hema Vaidyanathan
2006-2012	Dr. K P R Pramod	Dr. Vidyasagar Dr. Nalini Rao	Dr.V Lokesh	Dr. Tanveer Pasha	Dr. Naveen T	-	Dr. B K M Reddy Dr. Belliappa M S Dr. Viswanath, Dr. Nirmala S
2012-2014	Dr. Nirmala S	-	Dr. Kirthi Koushik A S	Dr.Amrit Kadam	Dr. Arul Ponni	-	Dr. K P R Pramod Dr.V Lokesh Dr. Jagannath Dr. Bhaskar V Dr. Vadhiraj Dr.Sridhar P S
2014-2015	Dr. Nalini Rao	-	Dr. Naveen T	-	Dr. Siddanna R Palled	-	Dr. Nirmala S Dr.Ramesh B Dr.Amrut Kadam Dr.Keerthi Koushik Dr.Sridhar P S
2015-2018	Dr.BelliappaMS	Dr.Hasib AG	Dr.SiddannaRPalled	Dr.Amrut Kadam	Dr.ShamsunderSD.	Dr.JanakiM G	Dr. Nalini Rao Dr.NaveenT Dr.GeetaHomkar Dr.PiyushSaxena Dr.SanjayMishra Dr.MohanKumar
2018-2020	Dr. Geeta S Narayanan	Dr. Naveen T	Dr. Vikram Maiya	Dr. PU Prakash Saxena	Dr. S D Shamsundar	Dr. Janaki M G	Dr. Belliappa M S Dr.Siddanna R P Dr. Karthik S Rishi Dr.Avinash H U Dr.Shantling Nigudgi Dr.Giriyappagouda
2020-2022	Dr. Sridhar P S	Dr. M S Vishveshwara	Dr. S D Shamsundar	Dr. S Mohan Kumar	Dr. Roopesh K	Dr.Bindu Joseph	Dr.Geeta S Dr. Vikram Maiya Dr. S Varun Kumar Dr.MSAthiyamaan Dr. Saurabh Kumar Dr. RajeevAG Dr. Ravindra G
2022-2025	Dr.lokesh V	Dr. L Vijay Bhaskar	Dr. Ravindra Ganganna	Dr. Milind Shetti	Dr. Sunil R.A	Dr. Abhishek Krishna	Dr. Sridhar P S Dr. Shamsundar Dr. Johan Sunny Dr. Sourjya Banerjee Dr. Naveen B Dr. Chaitra Dr. Sandesh Rao B Dr. Vishal Malavade Dr. Sachin Kotur

How to Access AROI Members Login

1. Please go to **https://aroi.org/**
2. In the Home page please find the link for **Members Login**, click on thebutton.
3. You will be redirected to a page named **AROI Member's Login**
4. In this page use your **registered e-mail id as Username** and **Password** toaccess Members Login.
5. In case if you **don't have the Password**, please **go to Seek/ForgetPassword**? displayed under the Log In button.
6. In this page you need to provide your **Registered e-mail id** and then
7. click on **Seek Password** button. *(After that please click on OK button under deliveredmessage to move on to Log In window)*
8. Your **dedicated Password** will be sent to your **registered email**.
9. Please check your registered e-mail (Inbox/Spam) for **Password**.
10. Use the given **Password** for login with your registered email id asusername.
11. ***NB: If you found this message "You email id does not match our records" while seeking the password, please contact AROI officials***

- After Log in you can view your profile details, and can modify/edit ifneeded. Just click on **Edit** button given on the page.
- You can edit your profile except your Name & LM Number.
- Here you can **download** the total membership details also. For thatclick on **Download Member Roaster.**

AROI CALENDAR 2026

AROI-ESTRO Teaching Courses		
12th AROI-ESTRO Advanced Technologies PGIMER, Chandigarh	29 Jan -1 Feb 2026	Dr Rakesh Kapoor 9872648344
Best of ASTRO		
Narayana Health, New Delhi	May 2026	Dr Kanika Sood Sharma (Tentative)
YROC 2026		
KIDWAI Memorial Institute of Oncology, Bangalore	24 - 25 Jan 2026	Dr Naveen T 9845221159
ICRO SUN PG 2026 (tentative schedule)		
JN Medical College, AMU, Aligarh, UP	April 2026	Dr Shadab
Cancer Institute (WIA) Adyar TN &PY	July 2026	Dr Priya Iyer
Cancer hospital, IGMC, Shimla NZ	September 2026	Dr Manish Gupta
AROI-ESTRO TEACHING COURSES 2026		
9th AROI- ESTRO Gynae Teaching course Homi Bhabha Cancer Hospital & Research Centre, Mullanpur/Sangrur, New Chandigarh, Punjab	26-29 Mar 2026	Dr. Tapas Kumar Dora
4th AROI- ESTRO Head & Neck Teaching course SGPGIMS, Lucknow UP	11 -13 Jun 2026	Dr Shalini Singh
13th AROI- ESTRO Advanced Technologies Teaching course-2026 GGSMCH, Faridkot	Jan 2027	Dr Pardeep Garg
AROICON 2026		
Apollo Cancer Institute, Hyderabad Telangana	3-6 Dec2026	Dr Vijay Karan Reddy

AROI Membership Process

ASSOCIATION OF RADIATION ONCOLOGISTS OF INDIA

Step 1 Download AROI Membership Form

- All details to be filled and duly proposed and seconded by a existing AROI member
- Preferably from the same institution

Click here

Step 2 Pay the Karnataka State Membership fees

- Account Name: Association of Radiation Oncologist of India
- Account No: **8409101001727**
- IFSC Code: **CNRB0008409**, MICR: 560015171
- **Amount : 3500**
- Mail the duly filled form and receipt to: **aroikarnataka@gmail.com**

Step 3 Return of the Form

- The form will be returned after a recommendation from the State Chapter
- Karnataka Membership Number will be provided

Step 4 Pay the Membership fees of the National Chapter

- Deposit Rs **10,000** to the bank account mentioned in the form
- Send the scanned copy of the form via mail to **secretaryaroi@gmail.com** or **vsrinivasan09@gmail.com**
- Post the hard copy to the address mentioned in the form.

Step 5 Receive Membership & Certificate

- The membership form will be reviewed and AROI membership number will be provided
- Certificate will be sent on email.

For any queries regarding Karnataka State Membership contact:
Dr. Sunil R. A
Secretary, AROI-Karnataka Chapter
9986239297

Obituary

Dr. Jayshankar Raju

We deeply mourn the passing of Dr. Jayashankar Raju, Consultant Radiation Oncologist, on 11th September 2025, at the age of 71 years.

He was from the first batch of Postgraduates of Kidwai Memorial Institute of Oncology and dedicated his life to the service of cancer patients. May his soul rest in peace

euphoria

THE CREATIVE SIDE




Dr Sudharshan Gupta
Associate Consultant
Narayana Health, Shimogga

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DEADLINE FOR ENTRIES – MARCH 15 2026

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editor.aroikarnataka@gmail.com

KARNATAKA RAJYOTSAVA

Karnataka Rajyotsava, celebrated on November 1st, commemorates the unification of all Kannada-speaking regions in South India to form the state of Karnataka in 1956, marking its official formation day to honor the state's rich language, culture, and unity, with festivities including flag hoisting, cultural events, and awards.