AROI Newsletter

Dec 2024 Vol.20, Issue 4



From the office of AROI

Dear All, Greetings from AROI !!!

We express our sincere appreciation for your presence at the 44th AROICON 2024. Your support and participation made the event even more special, and we are grateful for your commitment to make AROI successful. We hope that you had a wonderful time and that the experience was everything you hoped it would be. We believe that events like these are an opportunity to connect with like-minded individuals who share our passion and vision.

We invite you to follow us and to stay updated on our upcoming events and share your photos and experiences. If you have any questions or feedback, please don't hesitate to reach out to us. We are grateful for your support and look forward to seeing you at our future events.

Best Wishes



Dr. Manoj Gupta Chair AROI



Chairman – ICRO Dr. Sarbani Ghosh Laskar



Dr. S N Senapati President AROI



Dr. C S Madhu President Elect AROI



Dr. V Srinivasan Secretary General AROI



Secretary – ICRO Dr. Pooja Nandwani Patel



Vice Chairman – ICRO Dr. Gautam Sharan

AROI Newsletter





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Sr. Vice President Dr. Umesh Mahantshetty

Jr. Vice President Dr. Vikas Jagtap

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Dr. Vikas Jagtap

AROI - Vice President (Jr.)

Deputy Medical Superintendent Additional Professor & HOD Department of Radiation Oncology NEIGRIHMS, Shillong

Newsletter Editor

The views expressed are that of authors/ contributors

Minutes of the General Body Meeting during the 44thAROICON 2024, Mangalore-30thNovember 2024 (6:00- 8:15pm)

1. The Secretary General AROI- Dr V Srinivasan invited Dr Manoj Gupta President AROI & Dr S N Senapati President-Elect AROI to the dais. President AROI – Dr Manoj Gupta requested Dr V Srinivasan to start the meeting at 6:00 pm.

2. Attendance register was circulated to each & every one present in the hall.

3. Welcome address was given by the President AROI -Dr Manoj Gupta & Secretary General AROI Dr V Srinivasan.

4. Dr V Srinivasan, Secretary General AROI expressed his condolences to the members who had passed away in this year (Dr Vikas Madholia, Dr Nabeeza Begum L, Dr V. G. Sudhakaran, Dr Upasana Saxena, Dr Chandan Dasgupta, Dr C. Raghunath Rao, Dr Nagarjuna Reddy, Dr Rakesh Ranjan, Dr Upendra Nath Panda, Dr K. C. Sahoo, Dr G. Munuswamy, Dr Gopal Pemmaraju & Dr V Nagarajan) &homage was paid by observing a silence for 2 minutes.

5. Minutes of last GBM & action taken-

A) It was informed to the GB that a mail has been sent to AERB that the CyberKnife / GammaKnife equipment will be under the Radiation Oncology department. Ms. Swathy Nair of AERB replied that she has forwarded the same to the team updating the AERB guidelines.

B) It was informed to the GB that Dr Manish Pandey, Organizing Secretary of AROICON 2022 has promised to pay the dues to AROI (up to 15 Lakhs) very soon.

C) There was an issue regarding the exam pattern that has been changed for NEET SS exam with most of the questions being asked from General Medicine. So, a letter was sent from AROI to NMC that the NEET SS Exam pattern should be reversed back to the previous pattern & our President Prof. Manoj Gupta discussed with Dr Vijay Oza, President of PGMEB personally on phone many times and convinced him to revert back the questions for NEET SS entrance exam to previous pattern. The GB was informed that on 11th Oct 2024 a notice was issued by PGMEB that the questions in the paper for NEET SS 2025 will be exclusively from the topics of Medical Oncology-This was appreciated by all GB Members.

D) There used to be a full paper III of chemotherapy in previous curriculum of MD Radiation Oncology.

However, recently paper III is removed & instead of that a separate paper on Allied Oncology practices is introduced. We have sent a letter to Dr Vijay Oza, President PGMEB to reverse the syllabus back to the old pattern & the same was personally communicated to him by our President Prof. Manoj Gupta and explained the importance of chemotherapy paper. Dr Ojha gave assurance to Prof. Manoj Gupta to look into this matter positively & we hope we will get a favourable response soon.

All these minutes of 2023 were approved by GB, proposed by Dr Abhishek Basu & seconded by Dr Kishore Singh.

6. Dr. V. Srinivasan informed the GB that there will be 2 new members (Organizing Secretaries of YROC) who will be selected as YROF Representatives from 2025.

7. Regarding the issue of making radiation oncology mandatory in all medical college, Prof Manoj Gupta informed the GB that he was nominated as member of a committee constituted by MOHFW, GOI with a mandate to give recommendations to improve the radiotherapy facilities in the country. Dr Gupta further informed the GB that he has given recommendation to GOI to make radiation oncology specialty mandatory in all medical college which was incorporated in minutes of meeting. So, the matter is in active consideration of GOI and next executive will follow the matter further.

GB was informed about the new members who got enrolled from LM-4720 till LM-5189 (469 members). All of them were welcomed & approved by the GB, proposed by Dr JP Agarwal & seconded by Dr V. Kannan.

Dr V. Srinivasan requested all the zonal & state chapter secretaries to sign in the membership form &then forward it to secretaryaroi@gmail.com.

9. GB was informed about New ICRO membership list-All New ICRO members from LM-365 to LM-402 (37 members) were welcomed & approved, proposed by Dr Gautam K Sharan & seconded by Dr Vikas Jagtap. It was informed to the GB that all the faculties selected for AROI & ICRO Teaching Programmes should be ICRO members.

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ICRO SUN PG Teaching Programs in 2024 are completed as scheduled except for one. 45th ICRO-SUN PG- Hypofractionation -Govt. Medical College, Trivandrum-16th- 17th Dec 2023 –(Dr. Bindu SM).

46TH ICRO – SUN PG– Management of Radiation Toxicities – JNCH & RC, Bhopal, 20th -21st Apr 2024-(Dr. Gautam K Sharan).

48TH ICRO-SUN – Clinical Trials & Cancer Statistics -Max Super Speciality Hospital in association with AIIMS, Bathinda, - 26th -27th Oct 2024-(Dr. Rajesh Vashistha).

47TH ICRO-SUN – Recent Advances in Clinical Oncology – NRS Medical College, Kolkata- (Dr. Srikrishna Mondal)-This was not conducted due to RG Kar MC Issue, planned in 2025

11. The ICRO Pre-Conference Workshop conducted on 28th Nov 2024 (IMPACT was very successful with around 340 participants)

Here, Dr V Srinivasan emphasized that AROI membership is mandatory to attend the ICRO workshop & the same has to be mentioned in the Conference brochure of AROICON 2025.

12. ICRO- SUN Prodvance 2024(Role of Artificial Intelligence in Radiation Oncology)- ICRO - SUN Prodvance South Zone (SZ) was held on 27th – 28th Jul 2024 on at RCC, Trivandrum – Dr Francis V James &

ICRO – SUN Prodvance North Zone (NZ) was held on 21st-22nd Sep 2024 at PGIMER, Chandigarh – Dr Rakesh Kapoor.

These two courses had extremely poor response & participation from Post MD students. Hence AROI is thinking of dropping these courses from 2025-The EC already gave approval to stop conducting these courses from 2025.Now for GB approval, GB also gave approval to stop conducting these courses as it is not benefiting the targeted group, proposed by Dr Sabarinath & seconded by Dr Suruchi Singh.

22ND ICRO- INTAS RADIOBIOLOGYCOURSE was conducted on 16th November 2024 at AIIMS, Rishikesh – Prof Manoj Gupta.

14. AROI-ESTRO TEACHING COURSES 2024-

7th Gynae Teaching Course – 14th -17th Mar 24 at HBCH & MPMMC, Varanasi - Dr Satyajit Pradhan 2nd Head & Neck Teaching course- 6th -8th Jun 24 at MIOT International Hospital, Chennai - Dr V. Srinivasan Upcoming- 11th Advanced Tech Teaching course- 5th – 8th Dec 24 at AIIMS, Patna- Dr Pritanjali Singh

15. Best of ASTRO 2024 – No bid received for 2024; hence it was skipped this year.

16. 10th YROC was held on 20th - 21st Jan 2024 at AIIMS, Jodhpur- Dr Bharti Devnani

17. ICRO Quiz winners (ICRO SUN PG Courses) – ICRO quiz winners were informed to the GB.

45th ICRO Sun PG Quiz Winners- 1. Dr Mahak Gupta, KMC, Manipal 2. Dr Ankur Mahajan, AIIMS, Bhubaneswar

46th ICRO Sun PG Quiz Winners- 1. Dr Pratheesh C, Max, Saket 2. Dr Rohit Golla, JNCHRC, Bhopal 48th ICRO SUN PG Quiz Winners- 1. Dr Sachin Sakthivel, BHU Varanasi 2. Dr Dharmendra Kumar Sah, PGI Chandigarh-GB appreciated all the Winners

18. Dr V. Srinivasan informed that AROI was invited to participate in the ESTRO Meets ASIA Congress held on 23rd- 25th Aug 24 at KL, Malaysia. AROI also had a desk in the Communities Pavilion& there were more than 49 abstracts presented by the AROI members-GB appreciated all the Presenters.

19. FARO WEBINARS CONDUCTED:

29th FARO Webinar on Radiotherapy in Rectal Cancer New Paradigm was held on 26th Jun 2024- Organized by AROI & attended by 350 delegates.

30th FARO Webinar on Clinical experience on adjuvant ultra-hypo fractionated radiotherapy of breast cancer was held on 24th Jul 24- Dr. Rima Pathak was a Panelist.

The 31st FARO Webinar: "Navigating the Challenges of Radiation Therapy for Retroperitoneal Sarcomas" was held on 23 Oct 24- Dr. Siddhartha Laskar was a Panelist.

20. AROI GB Members were informed that the Dr GC Pant Young Doctor Award name has been changed to Dr KT Bhowmik from this conference as decided in the last GBM. AROI NZ deposited the money required for this name change. GB was also informed that Padmashree Prof. M Krishnan Nair Memorial Oration is going to be initiated from tomorrow in this conference.



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21. The GB was informed that the proposal to change the name of Dr Neil Joseph Fellowship is still available. (INR 10 Lakh has to be deposited in Central AROI Account for this name change, which will be valid for 10 years)

22. GB was informed about the following activities that were done by AROI in the past year-

a) Letter sent to AB PM JAY scheme authorities as in some centres reimbursement were not given for chemotherapy prescribed by Radiation Oncologists. -Reply awaited.

b) AERB Stakeholders consultation for Safety guide on Radiotherapy – AROI's comments on this issue was handed over in person to Dr Sahani (AERB) by Dr J P Agarwal & Dr Manish Chandra.

c) NER Radiation Oncology module by National Cancer Grid (NCG) – AROI's comments was sent to Ms Geetu Bagri of NCG-KCDO for modification in their EMR.

d) SOP on Patients Consent 2024 by Institute of Medicine & Law – AROI's comments for this draft SOP for 2024 was sent by Dr Abhishek Basu on behalf of AROI.

e) NAMP-AMR (National Alliance of Medical Professionals Antimicrobial Resistance) on consultation meeting was attended by AROI representative Dr Kanika Sharma Sood at IMA House, New Delhi on 7th Jul 24.- Prof. Manoj Gupta informed the General body that AROI is being invited to give their opinion from various societies across India for any new changes they are brining into the healthcare industry and it reflects on the strength of our Association.

23. AROI-ASCO Collaboration- GB was informed about the AROI-ASCO Collaborationinitiative taken by Dr Abhishek Basu. ASCO is willing to collaborate with AROI/ ICRO in the forthcoming conference at 45th AROICON 2025 at Kolkata. ASCO will sponsor 2 faculties from USA & we will provide only local hospitality. Joint AROI-ASCO Teaching Course in 2026 (Multidisciplinary Management of Breast Cancer) is also proposed. This collaboration is approved by EC, now for GB approval. GB also approved this collaboration proposed by Dr K C Patro & seconded by Dr Geeta Narayanan.

24. Dr Sabarinath wanted AROI to discuss with ASTRO & ESTRO that they should waive off their registration fees for AROI members. Dr Ramesh Bilimagga raised an objection to this & informed the GB that we are a strong association of more than 5000 members & we should stop begging the international associations for any waiver of fees. There was no further discussion on this issue.

25. Dr Vijay Anand Reddy informed the GB about AROI-ASTRO Collaboration and also that the Chart rounds – India which was started during his tenure is running successfully& asked Dr V Srinivasan Secretary General to mention that agenda in this meeting. GB appreciated the efforts taken by the Chart rounds India team for organizing the webinars without any break.

26. Dr J P Agarwal asked the question to Secretary General - What is the goal of AROI in all this International Collaboration? He also mentioned that we should start doing courses for students from other countries. Dr. V. Srinivasan replied that the goal of AROI is only academics & he also informed that the AROI & ICRO courses of late have lots of international student's participation across Asia.

27. GB was informed AROI ESTRO Courses for Advanced Technologies & Gynae Teaching courses will be joint courses till Dec 2025 & it will become ESTRO Endorsed AROI Courses from 2026. AROI- ESTRO Head & Neck Teaching course will continue as a joint course for two more years as it was started recently. A new MOU will be signed with ESTRO after discussion with the AROI Executive Committee in 2025.

28. Dr V. Srinivasan informed that there is a need to increase the life membership fees for AROI, ICRO & FICRO Award (INR 10000 inclusive of all taxes) in that INR 5000 goes for FD & remaining INR 5000 will go for Journal & AROI activities. - This increase in membership fees was approved by all EC members. Now for GB approval. Dr V Kannan raised the point that it might be difficult for students to pay INR 10000 as membership fees & he asked for a voting to be done by the members present for approval.

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Dr V. Srinivasan requested the GB to vote in favour of increasing the membership fees by raising their hands. More than 80% of the members approved this raise in membership fees from INR 7800 to INR 10000.

29. Dr V. Srinivasan has informed GB that almost all the chapters contributed for the journal expenses before the 31st Mar 24 & appreciated their support.

30. GB was informed that the deadlines for the fellowship/ best paper awards were extended by 10 days because of the RG Kar MC issue.

31. The TERN-AROI partnership proposal was brought by Dr Francis V James. TERN is an international recruitment agency wants to partner with AROI which will create new job opportunity for our members. Benefits to AROI- TERN will pay 1000 GBP for doctors placed in UK & 500 GBP for doctors placed in Middle East. Dr V. Srinivasan informed to the GB that we are yet to get an official MOU from TERN & the decision will be based on that. Dr Sabarinath wanted the AROI EC to get a legal opinion before accepting this proposal & this point was accepted by the Secretary General of AROI.

32. NCG Collaboration with AROI was proposed by Dr Pramesh. AROI will ask further details with their terms & conditions to decide on this proposal. Dr Sarbani informed the GB that if we make a resolution to be a part of NCG & submit that to NCG, by convention the President & the Secretary General of AROI will be taken as executive members in the NCG.

33. Dr KC Patro & Dr Ajitesh Avinash sent a request to affiliate their OSCE Educative Oncology course- EC already agreed to endorse this course, for GB approval. GB also approved to endorse this course proposed by Dr A Y Rao & seconded by Dr Manish Siddha.

34. JCRT ISSUES- Dr V. Srinivasan informed that the journal expenses are around INR 60 lakhs / year, in fact we have paid around INR 70 Lakhs for the journal last year.

Hence, EC was informed about some proposal to raise the money like increasing INR 1000 for AROI members and INR 2000 for others for article processing charges, INR 5000 for AROI members and 10000 for others for article publishing charges. -This raise in charges was approved by the EC, for GB approval.

Dr JP Agarwal wanted to know if AROI has done any financial calculations to charge members for publishing articles. Dr V Srinivasan informed this raise in fees will only contribute to a little extent for managing the journal expenses.

Dr Suruchi Singh wanted AROI EC to discuss with a financial consultant to increase the revenue for AROI than keeping the money in the bank. Dr Rajesh Vashistha informed the GB that there was a clear decision taken in the AROI GBM years ago that AROI's money will be transferred only to fixed deposit in the same bank & can not be invested anywhere else.

Dr V Srinivasan asked the GB to vote for the proposed increase in article publishing charges by raising their hands & most of them voted against the increase in article publishing charges. Hence this agenda is dropped.

35. AROI ICRO CALENDAR FOR 2025

AROI-ICRO Teaching Courses to Be Held in 2025-GB was informed of the following courses-

A). AROI-ICRO Sun PG Teaching course-2025 a) Vydehi Institute of Medical Sciences, Bengaluru – Dr Geeta Narayanan

b) SGPGI, Lucknow - Dr. Shaleen Kumar

c) AIIMS, Rishikesh – Prof. Manoj Gupta B) AROI-ESTRO COURSES-2025 (I) 8th AROI-ESTRO Gynae Teaching Course -KGMU, LUCKNOW -6th-9th Feb 2025- Dr. Rajeev

Gupta (II) 3rd AROI -ESTRO Head & Neck Teaching course -RCC, TRIVANDRUM – 5th -7th Jun 2025-

Dr. Francis V. James (III) 12th AROI ESTRO Advanced Technologies Teaching course- PGIMER, CHANDIGARH- Dr.

Rakesh Kapoor

C) 45th AROICON 2025 – Narayana Super Speciality Hospital, Howrah, WB- Dr Suman Mallik-

on 27th- 30th Nov 2025. D) Best of ASTRO- 2025 - Dr. RMLIMS, Lucknow – Dr Madhup Rastogi- 10th& 11th May 25. E) AROI-YROC-2025 - Meenakshi Mission Hospital & Research Centre, Madurai- Dr. Kirushna

Kumar - 25th & 26th January 2025. F) INTAS RADIOBIOLOGY 2025- AIIMS, Rishikesh- Prof. Manoj Gupta.

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All these were approved by GB. Proposed by Dr Rakesh Kapoor, seconded by Dr Bhavana Rai.

36. Bids Received for ICRO SUN PRODVANCE 2025& 2026 was deferred as AROI decided to drop these courses.

37. GB was informed about Bids Received for 2026: - 46th AROICON 2026-

• Bid by Dr Vijay Karan Reddy, Telangana chapter for Apollo Cancer Institute, Hyderabad

• Bid by Dr Rajesh Kumar Singh, Bihar chapter for SCI IGIMS, Patna- Dr Rajesh Kumar Singh from Patna withdrew the bidding for 46th AROICON 2026. Hence the conference will be conducted by Dr Vijay Karan Reddy of AROI Telangana chapter.

Dr. Vijay Karan Reddy thanked the GB for giving AROICON 2026 to the Telangana chapter and assured that they will organize a remarkable conference.

ICRO SUN PG 2026-

• JN Medical College, AMU, Aligarh – Dr. Md Shadab Alam, UP chapter.

• Cancer Institute, Adyar, Chennai- Dr. Priya Iyer, TN/PY Chapter.

• Cancer Hospital, IGMC, Shimla- Dr Manish Gupta, NZ.

EC gave approval to the following sites, for GB approval. GB also approved the courses to be conducted in those sites. Proposed by Dr Naidu, seconded by Dr Aftab Alam.

AROI-ESTRO TEACHING COURSES 2026:

(I) 9th AROI-ESTRO Gynae Teaching Course- 1. Homi Bhabha Cancer Hospital & Research Centre, Mullanpur/ Sangrur, New Chandigarh,

Punjab- Dr Tapas Kumar Dora NZ

(II) 4th AROI -ESTRO Head & Neck Teaching course- 1. SGPGIMS, Lucknow - Dr. Shalini Singh, UP chapter.

(III) 13th AROI- ESTRO Advanced Technologies teaching course –

1. GGSMCH, Faridkot- Dr Pardeep Garg, NZ YROC 2026:

• KMIO, Bangalore, Karnataka - Dr Thejaswini B

EC approved these sites for AROI ESTRO COURSES& YROC, for GB approval. GB also gave approval for these sites proposed by Dr Pavan Mehrotra& seconded by Dr Sanjukta Padhi. GB was informed that the Bid is open only for BEST OF ASTRO 2026.

38. FICRO awardees for 2024:GB members were informed about the FICRO awardees for 2024-

Dr Goura Kishor Rath

Dr Deepinder Singh

Dr Sanjukta Padhi

Dr Kaustav Talapatra

Dr Kanika Sharma Sood

Dr Susovan Banerjee Dr Vikas Kantilal Jagtap.

GB congratulated all the recipients.

39. AROI & ICRO ELECTIONS 2024: AROI & ICRO Elections 2024 were conducted successfully & following AROI/ICRO Office bearers were elected-

PRESIDENT ELECT AROI - Dr. C S MADHU

VICE PRESIDENT- SENIOR – Dr. UMESH MAHANTSHETTY

VICE PRESIDENT- JUNIOR - Dr. VIKAS KANTILAL JAGTAP

CHAIRMAN ICRO - Dr. SARBANI GHOSH LASKAR

VICE CHAIRMAN ICRO – Dr. GAUTAM KUMAR SHARAN SECRETARY ICRO – Dr. POOJA NANDWANI PATEL

GB thanked Dr Kishore Singh, Election Commissioner for conducting the elections without any hassles.

40. State & Zonal chapter elections were conducted successfully & the following were elected –

AROI WB CHAPTER ELECTION CONDUCTED IN NOV
2023

• PRESIDENT - Dr. LITAN NAHA BISWAS

• SECRETARY – Dr. ABHISHEK BASU

• AROI RJ CHAPTER ELECTION CONDUCTED IN DEC 2023

• PRESIDENT - Dr. SANDEEP JAIN

• SECRETARY- Dr NIDHI PATNI

• AROI UP STATE CHAPTER ELECTION CONDUCTED IN DEC 23:

• PRESIDENT - Dr. PAVAN MEHROTRA

• SECRETARY - Dr. SHADAB KHAN

• AROI NZ CHAPTER ELECTION CONDUCTED IN OCT 24:

• PRESIDENT - Dr. DEEPAK ABROL

• SECRETARY – Dr. PARDEEP GARG

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All GB members congratulated & welcomed the new office bearers.

41. Dr V. Srinivasan suggested some modifications from the forthcoming elections-

a) Campaigning should be stopped once voting process starts.

b) Addition / updation / correction in the Voters list will not be done once voting starts- need to follow this deadline strictly.

c) Reduce voting timeline from 10days to 7 days, till 6pm on last day.

d) Increase election nomination fees from INR 15000 to INR 20000.

e) Contestants can attend zoom call while final counting.

f) As its online voting, result can be declared by 12 noon on the 8th day-

Dr Sabarinath raised an issue that it is difficult to stop people from campaigning after the initiation of voting process.

Hence, the other points were accepted by the GB & these can be formed as guidelines for the next elections in 2026.

42. An audited report of AROI Saving AC/ AROI Current AC & AROI-ICRO account along with the proposed budget for 2025 was informed to GB members & the same was passed by GB, proposed by Dr Jyotirup Goswami & seconded by Dr K. S. Kirushna Kumar.

43. Dr Sapna Marcus will be the new treasurer of AROI & will be inducted in the new AROI Executive Committee. Henceforth Dr V. Srinivasan Secretary General of AROI & Dr Sapna Marcus Treasurer of AROI will be the authorized signatories for the AROI & the ICRO accounts.

44. Other points that were discussed in GB as below-

a) The Junior Vice-President of AROI will give the inaugural address in YROC.

b) SRS Forum of AROI needs to be formed something like YROF. We need to conduct a National Conference every year on Stereotactic Radio surgery under the banner of AROI like YROC. The Senior Vice President of AROI will be the convener for this forum. c) Dr Sarbani suggested for modification in the ICRO program by organizing 4-6 webinars.

d) Appointment of Secretary for AROI/ICRO OFFICE Activities/Communications is done as decided in the previous GBM.

e) Appointment of a committee for Constitutional amendments for typographical errors & inclusion of past GBM decisions.

f) Any conferences planned by State / zonal chapters, the respective office bearers to finalize the dates with the Secretary General of AROI.

g) Dr V. Srinivasan requested that the dates for future annual conferences of AROI to be done preferably in the 1st week of the December for more international participation.

All the above points were accepted & approved by EC, for GB approval. The GB also approved all the above points, proposed by Dr Shyam Kumar Srivastav & seconded by Dr Nidhi Patni.

45. Registration fees for AROICON 2025 were informed to all GB members (15% raise in the registration fees compared to AROICON 2024). Dr Ravindra Ganganna raised the point that there should be only 10% rise in the registration fees as per Byelaws& he also insisted that the registration for AROICON 2025 can be started only after the GBM.

Dr Jyotirup Goswami, Organizing Secretary of AROICON 2025 informed the GB that the cost of doing conference in Kolkata will be higher than Mangalore & also they have to pay huge amount of GST for the conference.

Dr C S Madhu also reiterated that the conference organizers should be allowed to start the registrations from the day 1 of the conference so that they can get more early bird registrations during the conference itself.

Dr Suresh Kumar raised an issue that the registration fees for the AROICON 2025 should be more subsidised than the early bird charges during the conference days.

Dr Abhishek Basu informed the GB that the raise in 15% of registration fees has been approved by the EC already & requested for the GB approval.



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Dr V Srinivasan asked the members of GB to vote for this rise in registration fees for the next conference by raising their hands. More than 80% of the members in GB gave approval for this raise in registration fees for AROICON 2025.

46. Prof C S Madhu suggested that there should be a stall for AROI in the annual conferences so that the members who attend the conference can update their details in the stall. Dr V Srinivasan accepted this suggestion and informed the GB that we can have a stall of AROI from the next conference.

47. Dr Naidu raised a point that NMC is giving approval for MD Radiation Oncology seats in Institutions where there is no proper infrastructure to teach Radiation Oncology. It was decided by the GB that AROI should send a letter to NMC regarding this.

48. Dr SN Senapati proposed Dr Rajesh Vashistha to be appointed as an Honorary Advisor without any powers in the AROI EC. This proposal was approved by all EC members, for GB approval. Dr Sabarinath raised an issue that senior members in the state chapters also will ask for honorary advisor post in the respective state chapters. Dr Suresh Kumar also raised a rejection that this post of honorary advisor should not be created in the AROI Executive Committee. Hence the GB did not accept this proposal.

49. The following highlights of 44th AROICON 2024 were shared with all GB members.

a) The Organizers of this conference has paid AROI INR 12.5 Lakhs (50%) before the conference & has set a perfect example for future hosts.

b) Registrations: 1725, the highest in AROICON history.

c) Research Abstracts: 626 Abstracts, 664 (Including Best Paper Abstracts), 90 Oral Presentation

d) ICRO Registrations: 340 participants

e) ICRO Workshop: PG Panelist Group with Faculty

Mentor – A first-try-well appreciated

f) UG Participation: 7 UG Registrations

g) Creative Horizons: Art corner for oncologists to exhibit paintings, sketches, poems, and photographs.h) Al Integration: Collaboration with PreMagic for real-

time Al-driven photo delivery via WhatsApp.

i) Pre-Event Engagements: Online events, WhatsAppbased activities, and quizzes

j) Alumni Meets: Dedicated spaces for reconnecting with Alumni

k) Talk on Financial Management.

All GB Members appreciated the organizers for arranging a spectacular conference under the leadership of Dr MS Athiyamaan.

Prof Manoj Gupta & Dr V Srinivasan thanked all the GB members for their active participation. Special thanks to the Organizing committee of 44thAROICON 2024 and also to the Joint Secretary Dr K. S. Kirushna Kumar for noting down the minutes of the meeting.

50. First GBM was dissolved with Vote of Thanks by the Secretary General.

51. After 5 minutes the second GBM was started under the new President Dr S N Senapati, the President of the new AROI Executive Committee invited all the newly elected members of AROI & ICRO to the dais & gave instructions to the Secretary General Dr V Srinivasan to start the second GBM.

52. Dr V Srinivasan welcomed all the members present for the Second GBM and proposed the first agenda that all the minutes of the meeting of the previous GBM to be approved.

All the minutes of 2024 were approved by GB, proposed by Dr G K Rath & Seconded by Dr Kishore Singh.

53. The second GBM was also dissolved with vote of thanks by the Secretary General.





SBRT in HCC: One size does not fit all



Dr. Divya Khosla Associate Professor Department of Radiotherapy & Oncology PGIMER, Chandigarh



Dr Treshita Dey Assistant Professor Dept of Radiotherapy SGPGI, Lucknow

Introduction:

Hepatocellular carcinoma (HCC), the most common primary liver malignancy, represents a complex therapeutic challenge due to its association with liver underlying dysfunction and the wide heterogeneity of disease presentation. Advances in locoregional therapies, including stereotactic body radiation therapy (SBRT), have expanded the therapeutic armamentarium for HCC. SBRT for HCC employs a risk-adapted approach to prescribe ablative radiation doses, balancing tumor control with liver safety. Recent clinical practice guidelines exhibit variability in their endorsement of SBRT as a standard-of-care option. While organizations like the American Association for the Study of Liver Diseases (AASLD) and the American Society for Radiation Oncology (ASTRO) recommend the use of SBRT for HCC, the Barcelona Clinic Liver Cancer (BCLC) group omits radiotherapy from its treatment framework (1-3). In contrast, the Indian National Association for the Study of the Liver (INASL) guidelines explicitly support SBRT, recognizing its role in delivering high local control (LC) and treatment precision, particularly for patients unsuitable for surgery or other locoregional therapies (4).

To advocate for SBRT in the multidisciplinary management of HCC as a radiation oncologist, it is

essential to highlight its features as an ideal locoregional therapy. These include excellent LC, a demonstrated survival benefit, minimized morbidity, and cost-effectiveness. SBRT has shown durable long-term LC, prolonged overall survival (OS), and low hepatic toxicity rates, making it a valuable treatment option, particularly for patients who are ineligible for surgery or other locoregional therapies.

However, as the field evolves, it becomes increasingly clear that SBRT is not a one-size-fits-all solution. This article explores the nuances of SBRT in HCC management, emphasizing patient selection, integration into multidisciplinary care, and the role of emerging technologies.

Personalized SBRT: Tailoring SBRT to Individual Needs Patient selection is pivotal in optimizing outcomes with SBRT. The heterogeneity of HCC patients arising from tumor burden, liver function, and comorbidities—necessitates personalized treatment approaches.

Tumor characteristics: Tumor size, location, and presence of vascular invasion play critical roles in determining SBRT dose fractionation. Smaller tumors, located away from critical structures, allow for higher ablative doses delivered in fewer fractions, maximizing tumor control while minimizing toxicity. In contrast, larger tumors or those situated near radiosensitive organs such as the gastrointestinal tract or central bile ducts require more conservative dose fractionation to reduce the risk of treatmentrelated complications. Additionally, tumors with vascular invasion may necessitate adjusted dose schemes to balance LC with the risk of toxicity to adjacent vasculature. SBRT can be considered when ablation is not feasible due to location (e.g., near large vessels causing the heat-sink effect) (5).

Liver Function: Underlying liver dysfunction, often quantified using the Child-Pugh (CP) score or albumin-bilirubin (ALBI) grade, significantly impacts SBRT planning and outcomes. Patients with CP-A or well-compensated B disease are ideal candidates. For decompensated patients, the risk of radiationinduced liver disease (RILD) is heightened.



SBRT in HCC: One size does not fit all

. A phase 1-2 trial published in 2015 used SBRT dosefractionation based on baseline liver function, with 48 Gy in 3 fractions typically used for CP-A patients and 40 Gy in 5 fractions for CP-B patients (6). Among CP-A patients, 8% progressed to CP-C, whereas 33.3% of CP-B patients experienced progression to CP-C, underscoring the importance of stringent dose constraints to the residual normal liver. Notably, progression of CP class was also found to be associated with overall survival (OS), highlighting the need to carefully balance treatment efficacy with the preservation of liver function.

Response to prior treatment: Patients with residual or recurrent disease post-TACE or ablation may benefit from SBRT as a consolidative therapy. Also, it is very important to take into consideration the volume of functioning liver in the background of chronic liver disease and cirrhosis. Hence, arises the concept of individualized SBRT protocols to maximize treatment efficacy and minimize adverse effects.

Dose fractionation in SBRT

There is no consensus on the optimal SBRT dosefractionation for HCC. It varies widely, ranging from 25-50 Gy in 3–10 fractions. Current clinical evidence shows durable long-term LC of 82% at 5 years within a wide range of prescription practices. The choice of dose-fractionation depends on factors such as tumor location and size, remaining liver volume, underlying cirrhosis, and baseline liver function status. It remains unclear whether a clear dose-response relationship exists for LC, as opinions in the literature differ. The presence of critical luminal structures and healthy nontumorous liver tissue often limits the dose that can be safely delivered. In patients with baseline CP-B status or tumors in close proximity to organs at risk, a more fractionated radiation therapy approach is necessary to mitigate toxicity and preserve liver function. SBRT in patients with \geq CP-B8 should be considered with caution. Interestingly, despite the generally lower prescription doses for patients with CP-B, SBRT has shown to offer comparable LC compared with CP-A (range, 65%-100%).

Adaptive RT:

Uncertainties in SBRT planning and delivery often limit the ablative doses that can be safely delivered to tumors abutting hepatobiliary structures or luminal gastrointestinal organs at risk. Adaptive radiation therapy (ART) addresses these challenges by adjusting the radiation treatment plan based on changes in the patient's anatomy or tumor characteristics over time. Stereotactic magnetic resonance-guided adaptive radiation therapy (SMART) is an advanced technique that enables the delivery of accelerated radiation doses while adhering to dose constraints for critical OARs. SMART mitigates uncertainties by utilizing on-table MRI for daily anatomical and positional adaptation, as well as effective motion management. This approach allows for reductions in planning target volume (PTV) margins and enables safe dose escalation, thereby improving treatment precision and efficacy. The first multi-institutional experience of MR-guided SBRT for liver did not show any grade >4 gastro-intestinal toxicity and 1-year LC of 80% (15).

An individualized adaptive approach to SBRT involves splitting radiation doses into two stages with a 4-week gap to reassess liver function. The indocyanine green (ICG) assay, which reflects real-time liver function through its clearance rate, is used to identify patients at high risk of liver toxicity and adjust doses accordingly. Since ICG is cleared exclusively by the liver and excreted into bile, it provides a dynamic assessment of liver health. Mid-treatment evaluation is typically performed one month after delivering 60% of the total intended dose to optimize safety and efficacy (16,17). The 1-year LC rate was 95.4%, with no significant difference between patients who had a treatment break and those who did not (p = 0.14) (16).

We present two challenging cases of HCC treated with SBRT. The treatment doses were carefully tailored based on a variety of parameters, including tumor size, location, liver function, and baseline patient characteristics.



SBRT in HCC: One size does not fit all

Study	Findings	Recommendations	P-Value
Scorsetti et al. s(7)	Improved 1-year LC in patients with BED \geq 100 Gy ₁₀ (100% vs 52%), median OS (27 vs 8 months)	Significant correlation between LC and higher doses	P < .05
Jang et al. (8)	54.8 Gy/ 3 fractions for 90% 2-year LC	Positive linear relationship between SBRT dose and LC & OS	LC: P = .006; OS: P = .002
Su et al. (9)	Higher SBRT dose associated with improved OS and PFS in both univariate and multivariate analyses	Recommend BED ≥100 Gy ₁₀	P < .05
Princess Margaret Hospital (10)	1-year LC 87% with median tumor size 7.2 cm and median dose of 36Gy/ 6 fractions	Dose-response relationship observed for LC; no significance on multivariate analysis	P = 0.25
Asian Liver Radiation Therapy Group Study (11)	Observed dose-response relationship in 510 HCC patients treated with BED \geq 100 Gy ₁₀ , significantly favorable 2-year LC and OS	BED ≥ 100 Gy ₁₀ recommended for HCC treatment	P < .01
Ohri et al. (12)	No evidence that LC for HCC is influenced by BED (33-60 Gy in 3-5 fractions, BED 60- 180 Gy ₁₀)	Total dose $(BED_{10} < 100 \text{ Gy vs.} \ge 100 \text{ Gy})$ significantly predicted 3-year LC though not 1-year LC or 1-year OS	P = 0.45
Long et al. meta- analysis (13)	Tumor size and RT dose were not vital factors impacting treatment outcome for small-sized HCC patients	CP-A class was significant predictor of optimal OS, while number of lesions might affect 1-year LC	
Meta-analysis by ISRS (14)	No relationship between BED and LC or OS; no correlation between tumor size and BED	Emphasis on personalized treatment approaches considering individual patient characteristics	P = 0.78

Summary of studies showing dose-response relationship in patients treated with SBRT in HCC

Regimen	Total dose-fractionation			BED ₁₀
Ultra-hypofractionation	Non-cirrhotic	(intrahepatic	40-60Gy/ 3-5#	72-180Gy
	cholangiocarcinoma)			
	CP-A		40-50Gy/3-5#	72-125Gy
	CP-B7		30-40Gy/5#	48-72Gy
			40-54Gy/6#	67-103Gy
			50-66Gy/10#	75-110Gy
Moderate hypofractionation	48Gy/12#			67.2Gy
	45-67.5Gy/15#			59-98Gy
	60Gy/12#			78Gy
	60-72Gy/22#			86-96Gy

Recommended dose fractionation (ASTRO) (2):



SBRT in HCC: One size does not fit all

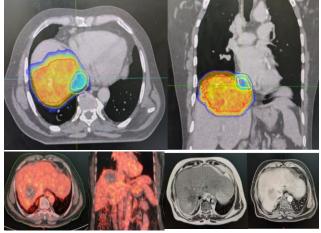
Dmean liver Ultra-hypofractionation		on	Moderate	Standard	Toxicity end-
	3#	5#	hypofractionation	fractionation	point
Non-cirrhotic	<12-15 Gy	<15-18Gy	< 24 Gy	<32 Gy	RILD
	<u>></u> 700cc <19 Gy	<u>></u> 700cc <21 Gy			
CP-A	<10-12 Gy	<13-15Gy <u>></u> 700cc <15 Gy	<20 Gy	<30Gy	CP increase 2 at 3 months
CP-B7	Not recommended	<8-10 Gy >500cc <10Gy	<16 Gy	<24 Gy	RILD

Recommended dose constraints for uninvolved liver (ASTRO)

These cases highlight the complexities involved in optimizing SBRT for HCC patients, where the dose must balance effective tumor control with minimizing toxicity, particularly in those with compromised liver function.

Case Study 1:

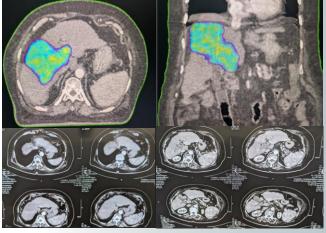
A 66-year-old male, known smoker with history of hypertension and coronary artery disease, diagnosed as NASH (non-alcoholic steato-hepatitis) related compensated cirrhosis and HCC-BCLC-C with intrahepatic and IVC tumor thrombus (CP-A) received TACE (trans arterial chemo-embolization), microwave-ablation and then lenvatinib. He was referred for SBRT to hepatic lesion and IVC thrombus extending till atrio-caval junction and received 35Gy/5# to intrahepatic lesion and 30Gy/5# to the IVC thrombus every alternate day. A PET-CT done at 4 months and MRI at 1 year after completion of SBRT showed non-viable lesion and bland thrombus.





Case Study 2:

A 72-year-old diabetic male, with compensated alcoholic cirrhosis was diagnosed to have HCC -BCLC-C CP-B7 with single intrahepatic lesion (6X5cm) and portal vein tumor thrombus. He received 35Gy/5# to intrahepatic lesion and 30Gy/5# to the tumor thrombus every alternate day. MRI for response



Case Study 2

assessment at 6 months showed non-viable lesion. Key Research Areas:

The unique immune environment of HCC makes immunotherapy a highly promising treatment option. Meanwhile, ongoing advancements in radiation therapy techniques have significantly enhanced both the safety and efficacy of HCC



SBRT in HCC: One size does not fit all

Key Research Areas:

The unique immune environment of HCC makes immunotherapy a highly promising treatment option. Meanwhile, ongoing advancements in radiation therapy techniques have significantly enhanced both the safety and efficacy of HCC treatment. The combination of these two approaches holds substantial potential to offer even greater benefits for patients. However, there is currently a lack of comprehensive studies on the combination of radiation therapy and immunotherapy in HCC, with a notable absence of robust prospective data, leaving substantial research gaps in this area. Additional research is required to address several critical questions, including the optimal sequence and optimal radiation dose for the combination therapy, the most effective immunotherapy agents in combination with SBRT and the biomarkers that can predict treatment outcomes.

Conclusion:

SBRT has established itself as a cornerstone in the management of HCC, offering a non-invasive yet effective option for carefully selected patients. However, its success hinges on tailoring the approach to individual patient and tumor characteristics, integrating it within multidisciplinary care, and leveraging emerging technologies. As the field progresses, ongoing research and innovation promise to further refine and expand the role of SBRT in HCC, underscoring the need for personalized, evidencebased approaches.

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Implementing Image guided brachytherapy in India – practical aspects



Dr Harjot Kaur Bajwa MBBS,DNB,AROI ABS Fellow UCSF(USA) Consultant Radiation Oncologist & Brachytherapy Specialist American Oncology Institute, Hyderabad

The burden of cervical cancer is huge in India, more so in the rural population. Majority of the patients in India present in advanced stage. With the advancements in brachytherapy over the past few years, image guided brachytherapy (IGBT) has become the standard of care in carcinoma cervix treatment. Adoption of the published IGBT guidelines and focus on dose escalation strategies like hybrid brachytherapy can significantly help in maximizing local control and minimizing toxicity in advanced cervical cancer.

However, there is heterogeneity across Indian institutions due to variable environments and resource constraints. It is therefore essential to create IGBT protocols best suited to each institution. This review focuses on practical recommendations on implementing IGBT protocols in institutions and potential errors that can occur during IGBT and solutions.

Gynecologic applicators for IGBT

There are a variety of applicators available for performing image guided brachytherapy in carcinoma cervix. These applicators are classified ลร intracavitary, intracavitary - interstitial (hybrid) and pure interstitial or template-based applicators. In order to accurately delineate the residual disease on CT / MRI, these applicators need to be CT / MR compatible. Choosing the appropriate BT applicator is essential for ensuring optimal coverage. Figure 1 illustrates some of the applicators available for IGBT in cervical cancer.

Target and OAR concept in IGBT

A thorough clinical examination, documentation in the form of clinical diagrams, and using information from available imaging modalities (MR/CT/ultrasound) are all essential for accurate target delineation.

GTV-Tres is defined as the residual tumor at the time of brachytherapy. The tumor is generally intermediate to high signal intensity as compared to hypointense cervical stroma on T2 weighted MR images (Figure 2a). It is not possible to accurately delineate the residual tumor on CT scan so there is no concept of GTV-Tres in CT based brachytherapy.

The high risk CTV (CTV-THR) is defined as the residual disease at the time of brachytherapy along with the entire cervix, and any extra cervical tumor extensions. The minimum dose received by 90% of the high risk CTV (D90 CTV-THR) is the most significant factor impacting local control in carcinoma cervix. The aim should be to achieve a D90 EQD2 of 85Gy or above while performing IGBT in carcinoma cervix. The intermediate risk CTV (CTV-TIR) is generated with safety margins on the high risk CTV in various directions to replicate the disease at the time of diagnosis (Figure 2a&b). For OARs, the minimum dose to the most irradiated tissue volume (0.1, 1, and 2 cm3) is defined as D0.1cc, D1cc, and D2cc, respectively. It is recommended to keep the D2cc to bladder, rectum and sigmoid below 80Gy, 65Gy and 65Gy EQD2 respectively for reducing morbidity.

MR based IGBT

MRI is the gold standard imaging modality for target delineation during cervical cancer radiotherapy. T2 weighted imaging in 3 orthogonal planes to the long axis of the cervix [non-fat saturated fast spin echo (FSE) images] best depicts tumor characteristics. The normal low signal cervical stroma provides intrinsic contrast for the high signal cervical tumor (Figure 3). Use of vaginal gel during MRI can help in assessing the extent of vaginal infiltration.



Implementing Image guided brachytherapy in India – practical aspects

CT based IGBT

In centers with limited access to MRI or logistic issues, a CT scan with applicator in situ can be performed for target and OAR delineation. It is difficult to appreciate the residual tumor and extent of parametrial infiltration on a CT scan as compared to MRI. Certain factors that can improve the accuracy of CT based IGBT are

1. Availability of pre brachytherapy MRI

Contouring the target directly on a CT scan during IGBT is challenging due to overestimation of the target width and underestimation of the target height. An MRI performed just before brachytherapy can give significant information regarding the residual tumour extent. This information can be used during target contouring on CT slices (Figure 4). One should be cautious in performing a rigid or deformable registration to fuse MRI and CT as the former is without the applicator and can have different bladder and rectum filling.

2. Incorporation of ultrasound imaging

Use of ultrasound imaging, especially trans rectal ultrasound (TRUS), during the applicator insertion can not only avoid perforation but also help in estimating the target width and thickness (Figure 5).

3. Use of landmarks like uterine artery / ureteric stents and IV contrast for accurate target delineation The upper limit of parametrial extension can be estimated by localizing the uterine artery on CT images. The use of IV contrast during CT imaging can help in contouring the target accurately as opposed to a plain CT scan (Figure 6).

4. Use of imaging protocol and diluted bladder contrast for CT based IGBT

All patients should receive laxatives / enema a day before the procedure for bowel preparation. The instillation of diluted contrast (1ml contrast in 20-50 mL normal saline) in the bladder helps in accurately distinguishing the bladder wall from the anterior border of the tumor and the bowel (Figure 7). Contrast should not be filled in the foleys bulb as it is clearly visible on CT and may result in artifacts.

Conclusion : Image guided brachytherapy is the standard of care in cervical cancer treatment. It is essential to form institutional workflows and protocols suitable to the available environment to maximize outcomes.

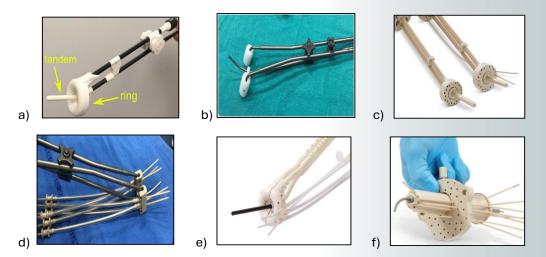


Figure 1. Applicators used in cervical cancer IGBT a) tandem & ring b) tandem & ovoid c) Aarhus hybrid applicator d) tandem & ovoid with needle holes e) Venezia applicator f) Kelowna interstitial template

Implementing Image guided brachytherapy in India – practical aspects

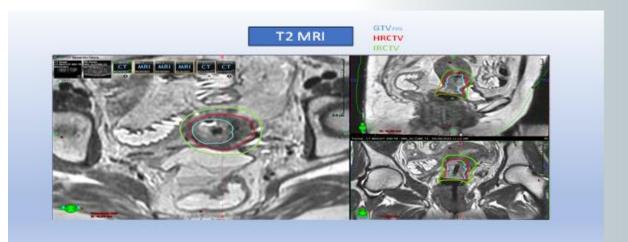


Figure 2a. The GTV-Tres (cyan) seen as high signal intensitity on T2 MRI. The CTV-THR (red) contoured as GTV-Tres along with entire cervix and extra cervical tumor extension. The CTV-TIR (green) contoured by giving margin to CTV-THR and excluding from OAR'S to replicate disease at the time of diagnosis

CT SCAN



Figure 2b. The CTV-THR (red) contoured as entire cervix and any extra cervical tumor extension. The CTV-TIR (green) contoured by giving margin to CTV-THR and excluding from OAR'S to replicate disease at the time of diagnosis



Implementing Image guided brachytherapy in India – practical aspects

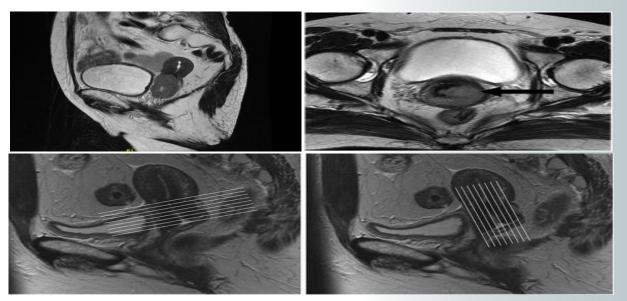


Figure 3. MRI sagittal (a) and axial (b) images showing high signal intensity tumor as opposed to low signal cervical stroma. MRI cuts in para-sagittal and para-axial planes (c).

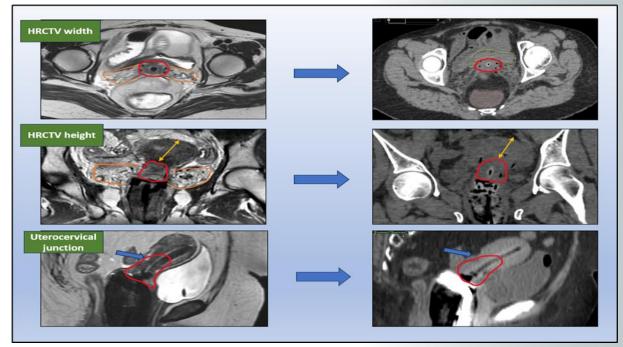


Figure 4. Using MRI information to estimate target width, height and tumour extent to contour on CT slices

a)

Implementing Image guided brachytherapy in India – practical aspects

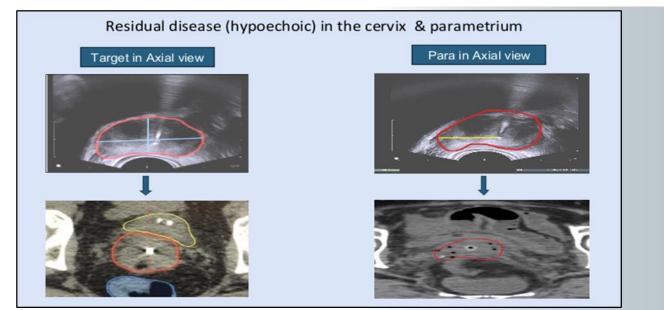


Figure 5. Using target width and thickness measurements from TRUS images to contour on CT images

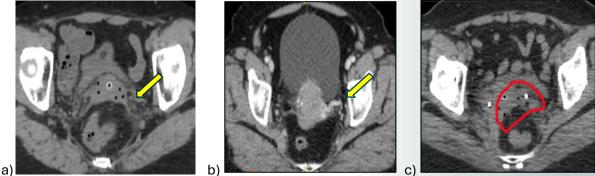


Figure 6. a) Uterine artery on plain CT axial image b) Uterine artery and enhancing tumor on CT axial image with IV contrast c) Using ureteric stent as markers for target extent

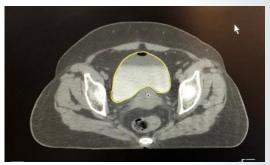


Figure 7. Contouring of bladder after instillation of diluted contrast

20

Annual Conference North East AROI

18 – 20 Oct 2024 Imphal

The 18th annual conference of NE Zonal Chapter of AROI was held successfully at Imphal on 18th ,19th and 20th October 2024 organized jointly by Karkinos Healthcare centre Imphal and AOI Imphal. It was well attended by delegates , PGs and faculties from inside and outside state. The Scientific program was of high quality with renown speakers From AIIMS Delhi. APOLLO Chennai, BHU, Kolkata, Hyderabad, Guwahati etc. Participating as resource

Dr. Y Indibor Singh & Dr. Gautam Sarma

Update from

persons. For the first time a contouring work shop was held on Nasopharynx and Brachytherapy in Cervix. Also for the first time in the chapter An Oration called NE Chapter AROI was Delivered by Dr. Daya Nand Sharma Prof. and Head IRCH AIIMS. PGs poster and oral competition was also participated well. The Event was closed in grand style with a Cultural show of Manipur Dance and Folk songs.'Prakash.







Annual Conference North Zone AROI

18 – 19 Oct 2024 Medanta, Gurugram

Update from Dr. Deepak Gupta

The North Zone AROICON 2024, held at Medanta Cancer Institute on October 18–19, focused on "Management of Oligometastatic Disease," a theme addressing therapeutic challenges and opportunities in this evolving field. Nearly 170 participants, including oncologists, clinicians, and residents, gathered to discuss the latest advancements and multidisciplinary approaches shaping patient care.

The conference opened with a welcome address by Dr. Tejinder Kataria, followed by an inauguration led by Dr. Naresh Trehan and other dignitaries. Dr. Manoj Gupta delivered the Prof. B.D. Gupta Oration, emphasizing the growing cancer burden and the critical gap in radiotherapy infrastructure, highlighting the need for 700 additional teletherapy units nationwide to meet the demand.

Key discussions centered on the role of stereotactic body radiotherapy (SBRT) in oligometastatic settings. Trials such as SABR-COMET and OLIGOCARE were revisited, showcasing survival benefits for selected patients with limited metastases, marking a shift from traditional palliative care to potential curative treatments. Novel imaging methods and biomarkers, including liquid biopsies and genetic profiling, were presented as tools for improving treatment precision and patient selection.

The integration of immunotherapy with SBRT was highlighted, with early findings showing enhanced local control and systemic immune responses. These developments position SBRT as transformative in managing oligometastatic disease.

The event concluded with poster presentations and awards for the top submissions. Dr. Deepak Gupta, the organizing secretary, extended gratitude to participants, faculty, and sponsors.

NZ-AROICON 2024 underscored collaboration and innovation, presenting oligometastatic disease as a treatable and potentially curable condition in select patients. The conference demonstrated the importance of integrating advanced imaging, systemic therapies, and precision radiotherapy to improve outcomes in this challenging domain.



35th UPAROICON 2024

9 – 10 Nov 2024 Prayagraj

The Regional Cancer Centre, Kamala Nehru Memorial Hospital, successfully hosted the 35th Annual Conference of the Association of Radiation Oncologists of India (AROI) UP Chapter on November 9th & 10th 2024 At AMA Convention Center Prayagraj, Themed "Innovative Cancer Treatment: From Bench to Bedside."

Day one Conference highlights

Preconference brachytherapy workshop conducted by Dr. B. Paul Thaliath and team which is attended by approx. forty post graduate trainee student and young faculties. During this live demonstration of interstitial brachytherapy done.

The Conference brought together renowned experts in Radiation Oncology to share their knowledge and expertise.

Conference attended by over 300 delegates, the distinguished speakers from all over the country, who delivered an excellent talk in various aspects of cancer treatment.

In the first day a galaxy of distinguished guest speaker delivered their talk on head and neck, breast, Gastrointestinal and Gynecological cancers along with panel discussions on recurrent head and neck and hepatobiliary cancers.

Update from Dr. Sonia Tiwari & Dr. B Paul Thaliath

Dr B N Lal Oration delivered by the Dr Sushma Agrawal, Professor, department of Radiation Oncology SGPGIMS Lucknow and shared her knowledge about various aspects of management of gallbladder Cancer.

In the Inaugural function key note lecture delivered by the esteemed Chief Guest of Dr. C. S. Madhu, President Elect AROI, Guest of honor Dr. Surendra Nath Senapati, Past President elect AROI, Guest of honor Dr M. L. B. Bhatt, Vice Chancellor of Hemwanti Nandan Bahuguna University Dehradun Uttarakhand, Dr Madhu Chandra CEO Kamala Nehru Memorial Hospital, Dr Pawan Kumar President AROI UP Chapter, Dr Shadab Alam General Secretary- AROI UP chapter. the Conference souvenir released by the dignitaries present on the dice and editorial board members. Welcome Address given by Dr B Paul Thaliath and vote of thanks given by Dr Sonia Tiwari. Inaugural function also attended by the renowned personalities of the city.

Over sixty post graduate trainee doctors and medical physicists presented their research poster. In Oncology Quiz conducted during the conference the teams of various institutes of the Uttar Pradesh enthusiastically participated.







35th UPAROICON 2024

Day two Conference highlights

The scientific session started with award winning session of oral research paper presentations by radiation oncology residents, young faculties and medical physicists, these events showcased the exceptional talent and dedication of our participants. Prize winners

In poster presentation first prize won by Dr Prasoon Mishra.In Oral Presentation (resident category) first prize won by Dr Vanshika Rastogi .In Oral Presentation (Medical Physics Category) first prize won by Miss Roselin Panda and in Young Faculty category first prize won by Dr Rashika Sachan.

First Prize in Onco-Quiz won by the team from SRMS Bareilly.

Talks were delivered by various renowned speakers of international repute like Dr Siddharth Laskar from Tata Memorial hospital Mumbai, Dr Tejider Kataria from Medanta Hospital Gurugram, on various aspect of cancer treatment. A panel discussion on Oligo metastatic breast cancer done by a panel of experts from radiation oncology, Medical Oncology and Surgical Oncology.

Dr M C Pant Oration delivered by the renowned Cancer Specialists of Eastern Uttar Pradesh Dr A K Chaturvedi who enlightened the delegates with his talk on orbital lymphoma.

Scientific Secretary Dr Mohammad Nawed Alam conducted the Valedictory function, All prize winners, organizing committee post holders who worked tirelessly to achieve this milestone were felicitated by the Association of Radiation Oncologists of India President Dr Pavan Kumar and general secretary Dr Shadab Alam and other dignitaries present on the stage, All the members of the organizing committee and supporting staffs who contributed significantly for the success of the conference were also got felicitated by the Organizing President Dr B Paul Thaliath and Organizing Secretary Dr Sonia Tiwari. Concluding remarks were given by Dr B Paul Thaliath.





22nd Clinical Radiobiology Course

16 Nov 2024 AIIMS, Rishikesh

Update from Dr. Manoj Gupta

22nd Clinical Radiobiology course was successfully conducted at AIIMS Rishikesh on 16th November.

Total 70 students from different parts of country participated.















Annual Conference MP & CG Chapter 2023-2024

7 – 8 Dec 2024 AIIMS, Bhopal Update from Dr. Suruchi Singh

The conference was held at AIIMS, Bhopal on 7th and 8th December 2024. The theme of the conference was "Recent advances in Radiation Oncology : Traditional to cutting edge." Dr. Manish Gupta was Organizing Chairperson and Dr. Saikat Das were Organizing Secretary for the conference.

There were 140 + registrations and meeting was attended by additional 37 graduate and post graduate students of AIIMS. Postgraduates from across the two states submitted more than 20 abstracts. Abstract book was unveiled during inauguration ceremony. We started Dr. (Prof.) M.S. Dwivedi oration from this year. It was presented by AIIMS Executive Director, Dr. (Prof.) Ajay Singh on "Recent advances in management of Bone tumors ". The conference ended on Sunday. All abstracts were allowed oral presentations and three best paper cash award and one medal (Dr. M. S. Gujral medal) were declared on 08.12.2024. Dr. M. S. Gujral best paper award was won by Dr. Arvind Padmanabhan from AIIMS Bhopal. Other winners were Dr. Amitima Mehta, Dr. Palak Lunkad, and Dr. Met la Bhanu Prakash.



44th AROICON

28 Nov – 1 Dec 2024 Mangalore

44th National Conference of the Association of Radiation Oncologists of India (AROICON 2024) 28th November – 1st December 2024

Mangaluru

Kasturba Medical College, Mangalore, in collaboration with the AROI Karnataka Chapter (Association of Radiation Oncologists of India), successfully hosted the 44th National Annual of Conference the Association of Radiation Oncologists of India (AROICON 2024) at the Dr. TMA Pai International Convention Center, Mangaluru, from 28th November to 1st December 2024. The event was organized by the Department Of Radiation Oncology, Kasturba Medical College, Mangalore under the leadership of Dr. M. S. Athiyamaan, Organizing Chairman, and Dr. Souriya Banerjee, Organizing Secretary, AROICON 2024.

AROICON 2024 was a monumental success, attracting over 1,700 delegates from across the country and 665+ featuring а record-breaking abstract submissions, marking the largest and most unprecedented participation in the conference's history. The pre-conference workshop, organized by the Indian College of Radiation Oncology (ICRO), titled "IMPACT - Interactive Modules for Problembased Assessment and Case-based Teaching," was held on 28th November. This engaging workshop, which involved over 400 participants, provided a unique and enriching educational experience. This year's conference also introduced undergraduate participation, a first in the history of AROICON.

Spanning four days, AROICON 2024 offered over 150 scientific sessions centered on the theme, "New Horizons in Radiation Oncology: Biology to Imaging to Therapeutics," at the prestigious Dr. TMA Pai International Convention Center. The conference comprehensively explored various aspects of cancer biology, advanced imaging technologies, and innovative therapeutic strategies, all aimed at elevating the standards of oncology care.

The conference had 3 oration talks delivered by

Update from Dr. M S Athiyamaan

eminent and distinguished faculty. Dr. BD Gupta Oration - Harnessing modern technology for comprehensive community - based oncology practice in developing countries was delivered by Dr. Shantanu Pal. Dr KA Dinshaw Oration- Artificial Intelligence in Radiation Oncology and Medicine was delivered by Dr. Catheryn Montgomery Yashar and Dr. Francis V James delivered the talk on Treatment Options for Prostate Cancer: From Dearth to Surfeit as the Dr Krishnan Nair Oration address.

The scientific sessions featured renowned faculty from across the nation and internationally. Among the distinguished international speakers were Dr. Catherine Yashar from UC San Diego Health, Dr. Derek Tsang from Princess Margaret Cancer Centre, Canada, and Dr. Elizabeth Ward from the University of Queensland, Australia. Eminent national faculties, including AROI's national office bearers, contributed to the scientific discussions, enriching the program with valuable insights into the latest advancements in Radiation Oncology. The conference also saw compelling debates on several controversial topics, culminating in a consensus among the fraternity.

The conference offered substantial prizes for quiz winners and abstract presenters, serving as a token of appreciation and motivation for students and emerging radiation oncologists. Additionally, several AROI members were awarded travel fellowships, which will further enhance their academic experience through training programs.

The inaugural ceremony, held on 29th November 2024 at the Dr. TMA Pai International Convention Center, was graced by Shri Dinesh Shukla, Chairman of the AERB, GOI, as the Chief Guest. The event was presided over by Dr. H. S. Ballal, Pro-Chancellor of MAHE, Manipal, with Surgeon Vice Admiral Dr. Arti Sarin, Director General of AFMS, and Lt Gen (Dr.) M. D. Venkatesh, Vice Chancellor of MAHE, Manipal, as the Guests of Honor. The ceremony also marked the celebration of the Platinum Jubilee of Kasturba Medical College, Mangalore,.

44th AROICON

with Dean Dr. Β. Unnikrishnan presenting commemorative mementos to the dignitaries in recognition of the institution's 70 years of excellence. The inaugural function marked the medal transfer by President – AROI Dr. Manoj Gupta to the incoming AROI – President Dr. S.N Senapati. FICRO/ICRO awards were presented and the outgoing AROI-EC members were felicitated. AROICON-2024 Souvenir and JCRT supplement of abstracts were also released during the programme. The programme had the august presence of Dr. Rajesh Vashistha Chair, AROI, Dr. Manoj Gupta President, AROI, Dr. S N Senapati President Elect, AROI, Dr. V. Srinivasan Secretary General, AROI, Dr. Rakesh Kapoor Chairman, ICRO, Dr. D N Sharma Editor-in- chief, AROI, Dr. Gautam K Sharan Secretary, ICRO, Dr V. Lokesh President, AROI-

KC, and Dr. Ravindra Ganganna Secretary, AROI-KC. The annual report of AROI was presented by Dr. V. Srinivasan, Secretary General, AROI

To provide delegates with an opportunity to unwind after a day of scientific discussions and immerse themselves in the culture of coastal Karnataka, traditional cultural programs and dinners were organized at the Dr. TMA Pai International Convention Center and Grand Bay, Airport Road, Mangaluru, on 29th and 30th November 2024. The inaugural dinner on 29th November was themed "Formal Finesse – An Evening of Elegance," while the Presidential Dinner on 30th November featured a vibrant theme of "Floral Fiesta." The cultural events were thoroughly enjoyed by all delegates, adding a colourful and festive atmosphere to the conference.



44th AROICON











11th AROI-ESTRO Teaching Course

5 – 8 Dov 2024 AllMS, Patna

The 11th AROI-ESTRO Teaching Course on Advanced Technology in Radiation Oncology was successfully hosted by the department of Radiation Oncology at AIIMS-Patna from December 5th to December 8th, 2024, with the theme "Closing the Gap with Advancing Technology." This four-day event brought together national and international experts in radiation oncology, aiming to enhance knowledge, skills, and technology adoption among practitioners in the field.

Organized under the patronage of Dr. Saurabh Varshney, Executive Director of AIIMS-Patna, under the leadership of AROI Course Director Dr. Indranil Mallick, Senior Consultant Radiation Oncologist at TMC Kolkata, and ESTRO Course Director Dr. Ben Heijmen, the event covered cutting-edge topics in radiation oncology. With the guidance of Dr. Pritanjali Singh, Professor and Head of the Department of Radiation Oncology at AIIMS Patna and her team, the course saw participation from over 100 radiation oncologists, physicists and radiotherapy technologist from India and neighboring countries. The event was inaugurated by Dr. Anup Kumar, Medical Superintendent of AIIMS-Patna, alongside with Dr. Manoj Gupta, Ex. President AROI. Esteemed dignitaries present were Dr. B. Sanyal (MCS, Patna), Dr. J.K. Singh (SS Hospital & Research Centre, Patna), Dr. Rajeev Ranjan (Medanta Hospital, Patna), Dr. P.N. Pandit, Dr Rajesh Singh (IGIMS).

Prominent international and national speakers added depth to the sessions, including:

• Dr. Andrew Hope, Radiation Oncologist at Princess Margaret Hospital, Toronto, Canada.

• Dr. Ben Heijmen, Medical Physicist and Professor of Radiation Oncology at Erasmus MC Cancer Institute, Rotterdam, Netherlands.

• Dr. Mairead Daly, Radiographer at Cancer Research UK.

Update from Dr. Pritanjali Singh

Key Highlights and Takeaways:

The teaching course featured a comprehensive agenda, including advanced treatment planning, error margins, biophysical models, particle therapy, artificial intelligence, and emerging technologies like FLASH and Grid therapy.

Day 1: Clinical Rationale and Targeted Radiotherapy The opening day set the stage with an insightful lecture by Dr. Andrew Hope (Radiation Oncologist at Princess Margaret Hospital, Canada) on the clinical rationale for using advanced technologies in radiotherapy. He emphasized the importance of motion management in delivering conformal radiotherapy, outlining three strategies:

1. Limiting Motion: Techniques such as breath-hold and abdominal compression.

2. Assessing Motion: Passive approaches to monitor respiratory motion.

3. Adapting Treatment: Active strategies to align radiotherapy with patient motion during delivery.

Mairead Daly (Radiographer at Cancer Research UK) explained about principal and practice of Respiratory motion management .Complementing this, Dr. Tejpal Gupta from Mumbai discussed incorporating modern imaging for precise target definition, while Dr. Santam Chakraborty from Kolkata delved into error margins and correction strategies.

Day 2: Innovations in SBRT and Particle Therapy.

The second day focused on stereotactic body radiotherapy (SBRT) and particle therapy. Dr. Tharmar Ganesh from Bengaluru introduced the radiobiology and physics of SBRT, while Dr. Hope explained frameless image-guided radiotherapy (IGRT).

Dr. Ben Heijmen provided a comprehensive overview of biophysical models, and Dr. Gupta addressed particle therapy's potential, challenges, and clinical evidence. A hands-on session on lung SBRT, led by Dr. Hope, included practical contouring and dose constraint guidelines.



11th AROI-ESTRO Teaching Course

Day 3: Adaptive Radiotherapy and Specialized Techniques

Day three emphasized adaptive radiotherapy and surface-guided radiation therapy. Dr. Mallick presented the principles of adaptive radiotherapy, discussions on supported bv its CT-based implementation by Dr. Sai Subramanian and Dr. Prakash Umbarkar. Dr. A K Anand delt in detail with first hand experience on MR LINAC. Clinical insights into specialized techniques included breast DIBH (Deep Inspiration Breath Hold) and IMRT, which was presented by Dr. Chakraborty. Liver SBRT contouring and planning principals was explained diligently by Dr. Supriya Chopra.

Day 4: Artificial Intelligence and Emerging Technologies.

The final day was dedicated to artificial intelligence (AI) in radiotherapy. Sessions explored AI's transformative potential in treatment planning, contouring, and impact analysis. Dr. Hope detailed its applications in radiotherapy, while Dr. Chakraborty discussed AI's role in improving accuracy and efficiency.

Dr. T. Ganesh introduced FLASH therapy, an innovative and promising technology delivering ultrahigh dose rates. The event concluded with a session on clinical trial design for assessing new technologies, presented by Dr. Jyotirup Goswami, and a summarizing take-home message by Dr. Mallick and Dr. Singh.

The 11th AROI-ESTRO Teaching Course on Advanced Technology in Radiation Oncology in India demonstrated the significant strides being made in radiation oncology, emphasizing the importance of adopting advanced technologies to improve patient outcomes. By addressing critical topics, involving leading experts and the focus on cutting-edge technologies the course highlighted its commitment to bridge gaps in radiation oncology through education. This event marks a milestone in advancing cancer treatment capabilities in the world, setting the stage for continued progress in the field.





AROI calendar 2025

AROI- YROC 2025				
MEENAKSHI MISSION	25-26 Jan 25	Dr KS Kirushna	9842113003	Challenges & Controversies in
HOSPITAL, Madurai, TN	25-20 Jan 25	Kumar	9842113003	Clinical Oncology.

ICRO- SUN PG				
1. NRS Medical College,	12- 13 Apr 25	Dr Anis	9674142260	Recent Advances in Clinical
Kolkata,WB		Bandyopadhyay		Oncology.
2.SGPGI, Lucknow, UP	28-29 Jun 25	Dr Shaleen Kumar	9415106837	Palliative Medicine in Oncology.
3. AIIMS, Rishikesh, Uttarakhand	30-31 Aug 25	Dr Manoj Gupta	9418470607	Landmark Trials & Practice Changing Evidence in Breast,
				H& N, GI & Gynaec cancers.
4.Vydehi Institute of Medical	11-12 Oct 25	Dr Geeta Narayanan	9980082823	Paediatric and Haematological
Sciences, Bangalore, Karnataka				Malignancies.

ICRO - INTAS RADIOBIOLOGY COURSE (Prof. Manoj Gupta)				
AIIMS, Rishikesh, Uttarakhand	Nov 25	Dr Manoj Gupta	9418470607	RADIOBIOLOGY

AROI-ESTRO Teaching Courses				
1.8 th AROI-ESTRO Gynaec	6-9 Feb,2025	Dr Rajeev Gupta	9369921291	KGMU, Lucknow
2.3 rd AROI-ESTRO Head & Neck	5-7 Jun,2025	Dr Francis V. James	9847189270	RCC, Trivandrum
3. 12 th AROI-ESTRO Advanced Technologies	29 Jan -1 Feb 2026	Dr Rakesh Kapoor	9872648344	PGIMER, Chandigarh

Best of ASTRO			
BOA - 10-11 May, 2025	Dr Madhup Rastogi	9418155955	RMLIMS, Lucknow

45 th AROICON 2025			
27 – 30 Nov 2025, BISWA	Dr Suman Malik / Dr.Jyotirup Goswami	9830545324	Narayana Super
BANGLA CONVENTION CENTRE,		9903388063	Speciality Hospital,
Kolkata			Kolkata

Penumbra

TMT bladder Cancer



Dr. Kanhu Charan Patro Prof. and HOD, Dept. of Radiation Oncology Mahatma Gandhi Cancer Hospital and Research Institute Vishakhapatnam, Andhra Pradesh

> In a case of muscle invasive bladder cancer Cystectomy and TMT are the answers.

When you are thinking of bladder preservation TMT is the standard treatment option.

Cystectomy is the primitive method TMT is now the prime method.

TMT starts with TURBT completion, Then NACT is followed by Chemoradiation.

Presence of hydronephrosis, multifocal CIS, VUJ and prostatic urethra involvement These are Cystectomy candidates and Surgeon's role is imminent.

There is no face-to-face randomization As it is a surgeon's domination.

Outcomes are similar in both the conditions, Many Meta-Analysis are of the opinions.

You can plan radiation using hypofractionation, So that it decreases the treatment duration.

All studies favor use of concurrent Cisplatin,



Dr. Ajitesh Avinash Senior Registrar Dept. of Radiation Oncology SUM Ultimate Medicare, Bhubaneswar, Odisha

Because Cisplatin is better than Carboplatin.

Those are not Cisplatin candidate, Surgeons' role is imminent.

Ileal conduit has its own compilation, Therefore, always try for organ preservation.

Quality of life is worse with Cystectomy, Organ preservation should be tried over cystectomy.

Ten-year survival data are similar in both the situation, Regular follow up is a must with Cystoscopic evaluation.

Patients with TMT have better bowel and sexual function, Patients gratification adds to oncologist's satisfaction.

Preserve salvage cystectomy for recurrence, That is our inference.

In bladder cancer, you can't ignore the role of radiation, As it has now a main role in organ preservation.

Fellowship - Best Paper Awards

FELLOWSHIP AWARDEES DURING 44TH AROICON 2024

- 1. Fellowship >50 yrs age group
 - a) Dr Shaleen Kumar- SGPIMS, Lucknow
- 2. Fellowship 41-50 yrs age group
 - a) Dr Pramod Kumar Gupta, Lucknow
 - b) Kalyan Singh Cl, Lucknow
 - c) Dr Lucy Pattanayak, AH PGI, Cuttack
 - d) Dr Sarthak Kumar Mohanty, Sterling Hospital, Rajkot
 - e) Waiting List Dr K. C. Patro, MGCH, Vizag
- 3. Fellowship 35-40yrs age group
 - a) Dr Nikhila K R- KMIO, Bangalore
 - b) Dr Koustav Mazumder- CNCI, Kolkata
 - c) Dr Sapna K -JNMC, Belagavi
 - d) Waiting list Dr Ayush Garg –SRMSIMS, Bareilly
- 4. Fellowship 30- 35 yrs age group
 - a) International
 - i. Dr Jayashree N P- KMC, Manipal
 - ii. Dr Sahaj Palod JNCI, Bhopal
 - iii. Dr Ankita Pandey Visiting Consultant, UP

- b) National
 - a) Dr Prachi Kalra AOI, Hisar
 - b) Dr Anmol Verma JNCI, Bhopal
 - c) Waiting list Dr Shaifali Mahajan – RGCI, New Delhi
- 5. Neil Joseph Fellowship
 - a) Dr Harsha N Mehta SMS Medical College, Jaipur
 - b) Dr Akshay Kewlani AHPGIC, Cuttack
 - c) Dr Anshula Awasthi JNCH & RC, Bhopal
 - d) Dr A Siddharthani IPGMER & SSKMH, Kolkata
 - e) Dr Sanyamita Jain SRMSIMS, Bareilly
 - f) Dr Nirlipta Mohanty AHPGIC, Cuttack
 - g) Dr Shrutikant Bhatia AIIMS, Rishikesh
 - h) Waiting list Dr Aniket Ganesh Jadhav – SRMSIMS, Bareilly
- 6. Less than 45 yrs RT Technologist
 - a) Mr Purshottam Singh RGCI & RC, Delhi
- 7. Medical Physicist fellowship (<40yrs)
 - a) Dr Balbir Singh GMCH, Mandi

BEST PAPER AWARDEES DURING 44TH AROICON 2024

- 1. Best Proffered paper for senior members (>40yrs)
 - a) Dr Kailash Kumar Mittal UPUMS, Etawah
- 2. Best Proffered paper for senior members (<40yrs)
 - a) Dr K Sruthi Amrita Institute, Kochi
- 3. DR M S GUJRAL GOLD MEDAL
 - a) Dr Sijo Sam Saji, Apollo CC, Hyderabad
- 4. DR M C PANT GOLD MEDAL
 - a) Dr Vrushab Rao, RHC, Pune
- 5. DR K T BHOWMIK YOUNG DOCTOR AWARD
 - (TRAVEL FELLOWSHIP)
 - a) Dr Shivani Sable, TMC, Mumbai

- 6. TRAVEL GRANT:
 - a) Dr Avilash Banerjee Yashoda Superspeciality Hospital, Hyderabad
 - b) Dr Srilekha Balaga AIMS, Kochi
 - c) Dr Sidharth Satish Menon KMC, Manipal
 - d) Dr Pamela Sen IMS BHU, Varanasi &
 - e) Dr Dharmendra Kumar Sah PGI, Chandigarh
- 7. Gold Medal Medical physics
 - a) Dr K. Mohamathu Rafic Apollo Chennai

Conquatulations









AROI-ESTRO

8th AROI-ESTRO Teaching Course on Gynaecological Cancer

3D Radiotherapy with a Special Emphasis on Implementation of MRI/CT Based Brachytherapy in Cervical Cancer

> 06th to 09th February 2025 Lucknow, India

Organized by Department of Radiation Oncology, King George's Medical University, Lucknow

Venue

Kalam Centre King George's Medical University, Lucknow





ARO WEST BENGAL CHAPTER ANNUAL STATE CONFERENCE 2025

ANNUAL STATE CONFERENCE 2023

🛗 15th & 16th February 2025 🞗 Dhono Dhanyo Auditorium, Kolkata

CONFERENCE SECRTARIAT

REGISTRATION

Dr. Abhishek Basu (Secretary, AROI WB) Mob No.: +91 98303 03459 Email: aroiwb@gmail.com

Website: www.aroiwb.org

PROFESSIONAL CONFERENCE ORGANIZER Unit : 506, 5° Floor, Krishna Building, 224A AUC Base Road, Kolkata - 700017 Mob. : +91 9667559095 | Email : tirthankar@globalics.in





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THE FEDERATION OF ASIAN ORGANIZATIONS FOR RADIATION ONCOLOGY

FARO 2025 X 36th THASTRO

Chiang Mai, THAILAND 13th - 15th November 2025

THAI ASSOCIATION OF RADIATION ONCOLOGY



Seasons Greetings!!



AROI Wishes You Merry Christmas & Happy New Year

