

The Royal College of Radiologists RCR-Cyclotron Trust Visiting Fellowships 2019/20 (Clinical Oncology)

POST-VISIT REPORT

PLEASE NOTE: This report must be completed and emailed to the RCR within 2 months of the end of your visit.

| 1. Name of Visiting Fellow | Dr Shanmugasundaram Ramkumar | | | |
|--|--|-----------------------|--|--|
| 2. Name of joint Visiting Fellow (if applicable) | n/a | | | |
| 3. Institution(s) of Visiting Fellow(s) | University Hospital Southampton NHS Foundation Trust | | | |
| 4. Name of Host(s) | Dr Ester Orlandi -CNAO, Pavia, Italy | | | |
| 5. Institution(s) of host(s) | CNAO | | | |
| 6. Expenses claimed | £1964.11 | | | |
| 7. Visit Dates (ACTUAL) | a. Start Date: 25/07/22 | b. End Date: 29/07/22 | | |
| 8. 2 nd visit dates (if applicable) | a. Start date | b. End Date | | |

9. Aims of the visit

- a) Understand the characteristics & clinical applications of Carbon Ion therapy (CIT) in treating radioresistant Skull base tumours, Head and Neck tumours, Sarcomas and recurrent cancers.
- b) Gain first hand working knowledge of Carbon Ion therapy treatment and compare effectiveness of CIT with PBT and IMRT.
- c) Clinical Indications for consideration of CIT treatment
- d) Management of cancer patients during CIT treatment and the immediate post treatment period
- e) 5. Exposure to clinical data on efficacy of CIT at CNAO, Pavia.

10. Activities undertaken

Clinical Observer at CNAO under supervision of Dr.Ester Orlandi and attended:

i. New patient Consultations with CNAO clinicians

- Tumour Board meetings with multidisciplinary team discussing appropriateness for CIT and PBT
- iii. Review of on-treatment patients receiving proton therapy and CIT.
- iv. Review of CIT treatment plan evaluation with Oncologists and Physicists.
- v. Radiotherapy plan comparisons of CIT and PBT plans.
- vi. Onset verifications of CIT treatment and observed treatment set up.
- vii. Review of CIT planning process for complex radioresistant cancers and recurrent chordomas, sarcomas and H&N cancers.
- viii. Experienced the whole patient pathway (consult, immobilisation, planning, verification, ontreat review).

11. Benefits of the visit (short term)

- i. Practical knowledge of physics on CIT and advantages over conventional RT and limitations.
- ii. Dosimetric challenges of CIT, 2 phase plans, CIT-PBT plans
- iii. Better understanding of the referral indications for CIT
- iv. Management of cancer patients during CIT treatment.
- v. Exposure in the wider clinical applications of CIT & proton therapy particularly for reirradiation.
- vi. Personal experience of a patient pathway for CIT.

12a. Envisaged benefits of the visit longer term (your own practice)

- i. Well informed Clinical Oncologist on benefits of CIT and aid in appropriate patient selection.
- ii. Allow for a better discussion with patients and carers the benefits & limitations of CIT therapy and guide patients with radioresistant cancers and complex recurrent cancers.
- iii. Greater awareness of an additional treatment modality (CIT) for a group of cancer patient with radioresistant cancers and recurrent cancers who had previous radiotherapy.

12b. Envisaged benefits to the wider group (dissemination to others in your centre/clinical oncology community/multiprofessional team)

- i. 1. Disseminate knowledge gained to consultant colleagues and trainees in Wessex region through educational sessions and create awareness of CIT.
- ii. 2. Potential referral for CIT for recurrent Chordomas, non-squamous H&N cancers and for complex re-irradiation in H&N cancer patients

13. Please outline any problems you encountered before, during or after your visit

I had to organise my own timetable as CNAO team was a bit lax in scheduling my Fellowship despite advance notice.

14. Any additional comments

None

| 15. Do you have any 'top tips' that you would like to share with prospective visiting fellows? | | | | |
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| Learn some Italian! | | | | |
| Signed: 1.2 t | | Date: | 09/08/2022 | |
| Dr Shanmugasundaram Ramkumar | | | | |
| Report approved by: | Clinical Oncology Professional Support and Standards Board | | | |
| Date: | 27 October 2022 | | | |

Please return this form to Mrs Emma Burgum, Professional Support and Standards Administrator at: emma_burgum@rcr.ac.uk