


XXXII CONGRESSO NAZIONALE AIRO  
XXXIII CONGRESSO NAZIONALE AIRB  
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# AIRO2022

Radioterapia di precisione per un'oncologia innovativa e sostenibile

BOLOGNA, 25-27 NOVEMBRE  
PALAZZO DEI CONGRESSI

 Associazione Italiana  
Radioterapia e Oncologia clinica

 Società Italiana di Radiobiologia

 Associazione  
Italiana  
Radioterapia  
e Oncologia  
clinica  






## DICHIARAZIONE

### Relatore: Costanza Maria Donati

Come da nuova regolamentazione della Commissione Nazionale per la Formazione Continua del Ministero della Salute, è richiesta la trasparenza delle fonti di finanziamento e dei rapporti con soggetti portatori di interessi commerciali in campo sanitario.

- Posizione di dipendente in aziende con interessi commerciali in campo sanitario (NIENTE DA DICHIARARE)
- Consulenza ad aziende con interessi commerciali in campo sanitario (NIENTE DA DICHIARARE)
- Fondi per la ricerca da aziende con interessi commerciali in campo sanitario (NIENTE DA DICHIARARE)
- Partecipazione ad Advisory Board (NIENTE DA DICHIARARE)
- Titolarità di brevetti in compartecipazione ad aziende con interessi commerciali in campo sanitario (NIENTE DA DICHIARARE)
- Partecipazioni azionarie in aziende con interessi commerciali in campo sanitario (NIENTE DA DICHIARARE)
- Altro



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## **RADIOTERAPIA PALLIATIVA SHORT COURSE NEI TUMORI SOLIDI AVANZATI: ANALISI AGGREGATA (PROGETTO SHARON)**

**Costanza Maria DONATI**, Gabriella MACCHIA, Giambattista SIEPE, Alice ZAMAGNI, Anna BENINI, Francesco CELLINI, Milly BUWENGE, Savino CILLA, Silvia CAMELLI, Stefania RIZZO, Luciana CARAVATTA, Tigeneh WONDEPAGEGNYU, A. F. M. Kamal UDDIN, Biniyam Tefera DERESSA, Mostafa A. SUMON, Elisa LODI RIZZINI, Alberto BAZZOCCHI, Alessio G. MORGANTI, Francesco DEODATO, Eleonora FARINA





## PALLIATIVE PATIENTS & RT

- Short treatments
- Symptomatic relief
- Low risk of toxicity
- More rapid tumor response

## ➔ ACCELERATED-HYPOFRACTIONATED RT

ANTICANCER RESEARCH 39: 4237-4242 (2019)  
doi:10.21873/anticancer.13585

### Palliative Short-course Radiotherapy in Advanced Pelvic Cancer: A Phase II Study (SHARON Project)

ELEONORA FARINA<sup>1</sup>, GABRIELLA MACCHIA<sup>2</sup>, GIAMBATTISTA SIEPE<sup>3</sup>,  
ALICE ZAMAGNI<sup>3</sup>, MILLY BUWENGE<sup>3</sup>, ERICA SCIROCCO<sup>3</sup>, FRANCESCO CELLINI<sup>4</sup>,  
BINIYAM T. DERESSA<sup>5</sup>, WONDEMAGEGNEHU TIGENEH<sup>5</sup>, KAMAL A.F.M. UDDIN<sup>6</sup>,  
MOSTAFÀ AZIZ SUMON<sup>7</sup>, LUCIANA CARAVATTA<sup>8</sup>, DOMENICO GENOVESI<sup>8</sup>, FLORA ANNA MAURO<sup>1</sup>,  
SILVIA CAMMELLI<sup>3</sup>, SAVINO CILLA<sup>9</sup>, ALESSIO G. MORGANTI<sup>3</sup> and FRANCESCO DEODATO<sup>2</sup>

Clinical & Experimental Metastasis (2018) 35:605–611  
<https://doi.org/10.1007/s10585-018-9931-9>

RESEARCH PAPER



### Short-course regimen of palliative radiotherapy in complicated bone metastases: a phase i–ii study (SHARON Project)

Jenny Capuccini<sup>1</sup> · Gabriella Macchia<sup>2</sup> · Eleonora Farina<sup>1</sup> · Milly Buwenge<sup>1</sup> · Domenico Genovesi<sup>3</sup> ·  
Luciana Caravatta<sup>3</sup> · Nam P. Nguyen<sup>4</sup> · Silvia Cammelli<sup>1</sup> · Savino Cilla<sup>5</sup> · Tigeneh Wondemagegnhu<sup>6</sup> ·  
A. F. M. Kamal Uddin<sup>7</sup> · Mostafà Aziz Sumon<sup>8</sup> · Francesco Cellini<sup>9</sup> · Vincenzo Valentini<sup>9</sup> · Francesco Deodato<sup>2</sup> ·  
Alessio G. Morganti<sup>1</sup>

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Clinical & Experimental Metastasis (2018) 35:739–746  
<https://doi.org/10.1007/s10585-018-9942-6>

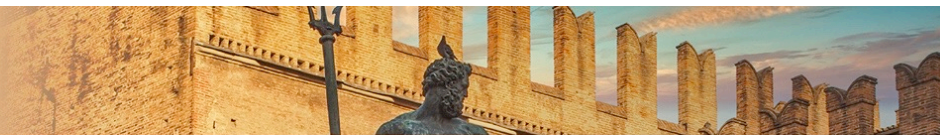
RESEARCH PAPER



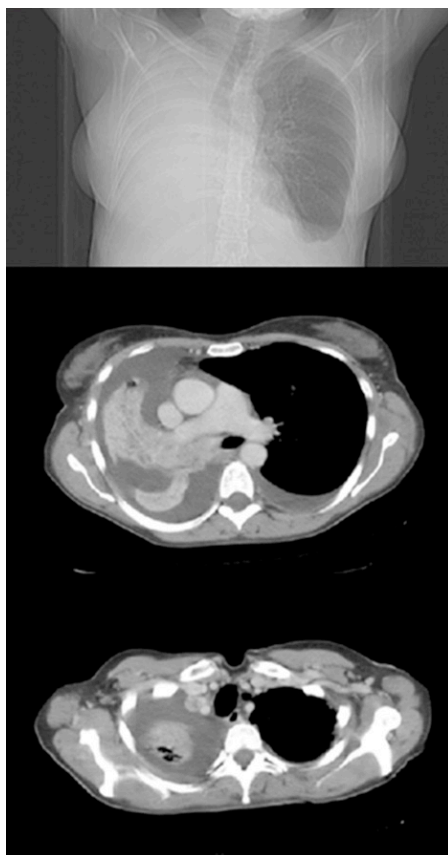
### Radiotherapy in palliation of thoracic tumors: a phase I–II study (SHARON project)

Eleonora Farina<sup>1</sup> · Gabriella Macchia<sup>2</sup> · Milly Buwenge<sup>1</sup> · Giambattista Siepe<sup>1</sup> · Alice Zamagni<sup>1</sup> ·  
Silvia Cammelli<sup>1</sup> · Savino Cilla<sup>3</sup> · Tigeneh Wondemagegnhu<sup>4</sup> · Aynalem A. Woldemariam<sup>4</sup> · A. F. M. Kamal Uddin<sup>5</sup> ·  
Mostafà Aziz Sumon<sup>7</sup> · Francesco Cellini<sup>6</sup> · Francesco Deodato<sup>2</sup> · Alessio G. Morganti<sup>1</sup>

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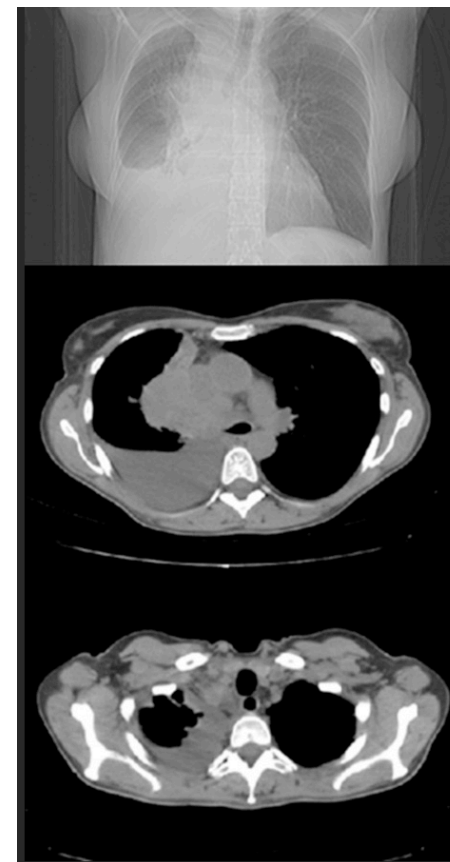
## Patient with locally advanced non-small cell lung tumor

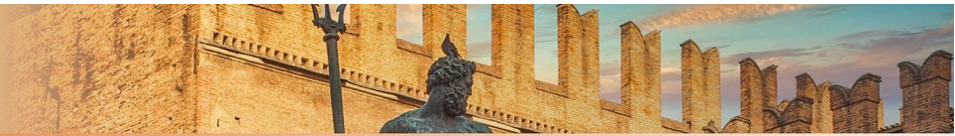


20 Gy in 4 fractions bid.

After 3 days

→ complete response of dyspnea





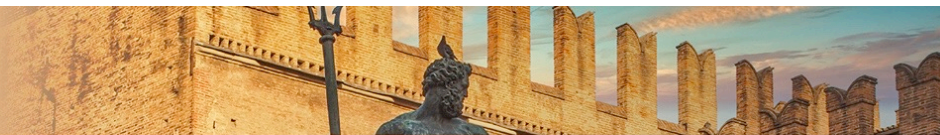
		n	Complete symptoms remission		Partial symptoms remission		No change		Symptoms progression		Overall Response Rate*		p	Fisher's exact test
			n	%	n	%	n	%	n	%	n	%		
→ Tumor stage	Advanced primary cancer	75	24	32.0	49	65.3	2	2.7	0	0	73	97.3	0.021	0.017
	Metastatic cancer	105	27	26.0	60	57.0	12	11.5	6	5.5	87	83.0		
→ Histologic type	Squamous cell carcinoma	62	22	35.5	35	56.5	3	4.8	2	3.2	57	92.0	0.766	0.750
	Adenocarcinoma	74	18	24.3	47	63.5	7	9.5	2	2.7	65	87.8		
	Others	44	11	25.0	27	61.3	4	9.0	2	4.7	38	86.3		
→ Site	Head & Neck	52	13	25.0	31	59.6	6	11.5	2	3.9	44	84.6	0.179	0.214
	Thorax	54	14	25.9	38	70.4	2	3.7	0	0	52	96.3		
	Bone	49	17	34.7	23	46.9	5	10.2	4	8.2	40	81.6		
	Pelvis	25	7	28.0	17	68.0	1	4.0	0	0	24	96.0		
→ ECOG <sup>1</sup>	0-1	80	23	28.8	47	58.8	7	8.8	3	3.6	70	87.6	0.953	0.949
	2-3	100	28	28.0	62	62.0	7	7.0	3	3.0	90	90.0		
→ Baseline symptoms	Pain	116	31	26.7	69	59.5	10	8.6	6	5.2	100	86.2	0.524	0.593
	Dyspnea	22	4	18.2	16	72.7	2	9.1	0	0	20	90.9		
	Bleeding	11	5	45.5	6	54.5	0	0	0	0	11	100		
	Dysphagia	8	0	0	7	87.5	1	12.5	0	0	7	87.5		
	Other	9	4	44.4	5	55.6	0	0	0	0	9	100		
→ Radiotherapy dose	Multisymptomatic	14	7	50.0	6	42.9	1	7.1	0	0	13	92.9	0.257	0.248
	<18 Gy	36	6	16.7	27	75.0	2	5.6	1	2.7	33	91.7		
	18 Gy-20 Gy	144	45	31.2	82	57.0	12	8.5	5	3.3	127	88.2		

		n	Complete symptoms remission		Partial symptoms remission		No change		Symptoms progression		Overall Response Rate*		p	Fisher's exact test
			n	%	n	%	n	%	n	%	n	%		
<b>Tumor stage</b>	Advanced primary cancer	75	24	32.0	49	65.3	2	2.7	0	0	73	97.3	0.021	0.017
	Metastatic cancer	105	27	26.0	60	57.0	12	11.5	6	5.5	87	83.0		
<b>Histologic type</b>	Squamous cell carcinoma	62	22	35.5	35	56.5	3	4.8	2	3.2	57	92.0	0.766	0.750
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<b>Site</b>	Head & Neck	52	13	25.0	31	59.6	6	11.5	2	3.9	44	84.6	0.179	0.214
	Thorax	54	14	25.9	38	70.4	2	3.7	0	0	52	96.3		
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	Pelvis	25	7	28.0	17	68.0	1	4.0	0	0	24	96.0		
<b>ECOG<sup>1</sup></b>	0-1	80	23	28.8	47	58.8	7	8.8	3	3.6	70	87.6	0.953	0.949
	2-3	100	28	28.0	62	62.0	7	7.0	3	3.0	90	90.0		
<b>Baseline symptoms</b>	Pain	116	31	26.7	69	59.5	10	8.6	6	5.2	100	86.2	0.524	0.593
	Dyspnea	22	4	18.2	16	72.7	2	9.1	0	0	20	90.9		
	Bleeding	11	5	45.5	6	54.5	0	0	0	0	11	100		
	Dysphagia	8	0	0	7	87.5	1	12.5	0	0	7	87.5		
	Other	9	4	44.4	5	55.6	0	0	0	0	9	100		
Multisymptomatic	14	7	50.0	6	42.9	1	7.1	0	0	13	92.9			
<b>Radiotherapy dose</b>	<18 Gy	36	6	16.7	27	75.0	2	5.6	1	2.7	33	91.7	0.257	0.248
	18 Gy-20 Gy	144	45	31.2	82	57.0	12	8.5	5	3.3	127	88.2		

Overall Response Rate\*: complete plus partial remission.

**Bleeding → Overall Response Rate: 100%**





## Conclusions

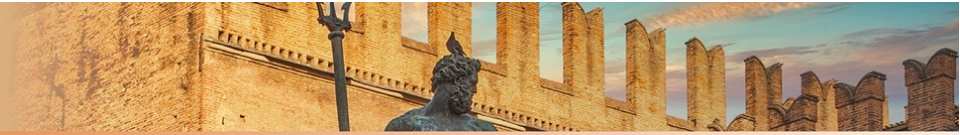
- ✓ The markedly and significantly **higher complete pain response rate**, in patients with mild-moderate pain  
→ early referral to palliative RT for patients with cancer-related pain
- ✓ The **symptomatic efficacy** of the SHARON regimen **independent** of anatomic site, histological type, performance status, prevalent symptom, and delivered RT dose
- ✓ The complete symptomatic response rate was < **50%** in all analyzed subgroups
- ✓ Moreover, these results justify the design of **further studies to improve the effectiveness of this regimen**
  - **7 randomized trials** are currently underway in our centers to compare the results
    - accelerated treatment: 20 Gy in two days
    - traditional treatment: 30 Gy in two weeks



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# Thank you for your attention!