


XXXII CONGRESSO NAZIONALE AIRO  
XXXIII CONGRESSO NAZIONALE AIRB  
XII CONGRESSO NAZIONALE AIRO GIOVANI

# 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  
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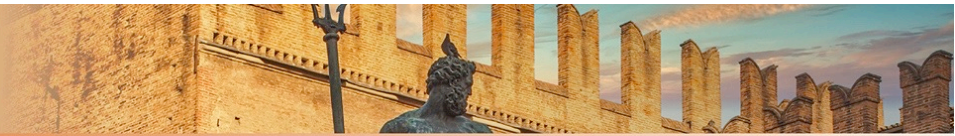
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## **LA.D.I.E.s Project**

# **LA**rge **D**atabase **I**n **E**ndometrial cancer**s** for a personalized treatment

*R. Autorino*

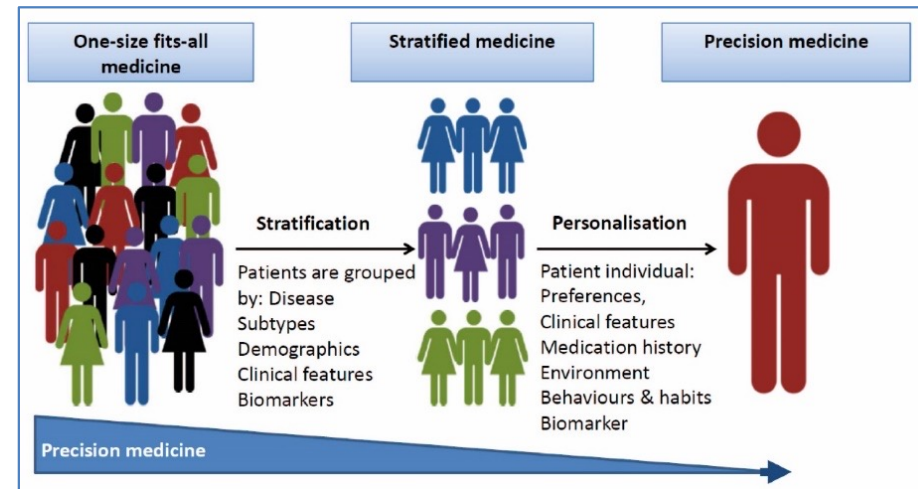


## BACKGROUND

# ENDOMETRIAL CANCER

### Classical risk factors

- Grade
- Myometrial invasion
- Histologic subtype
- LVSI
- Stage
- Age



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## AIM

*Raccolta retrospettiva con la realizzazione di un large database per l'archiviazione organizzata e standardizzata di **dati clinici** condivisa tra i diversi centri oncologici per la valutazione della **tossicità e sopravvivenza nel tumore dell'endometrio**.*

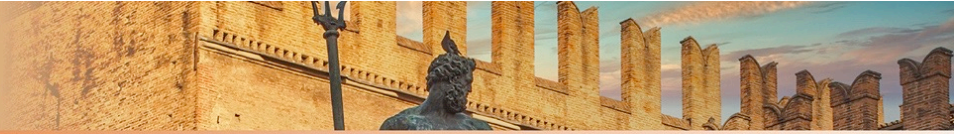
## MATERIALS & METHODS

### INCLUSION CRITERIA:

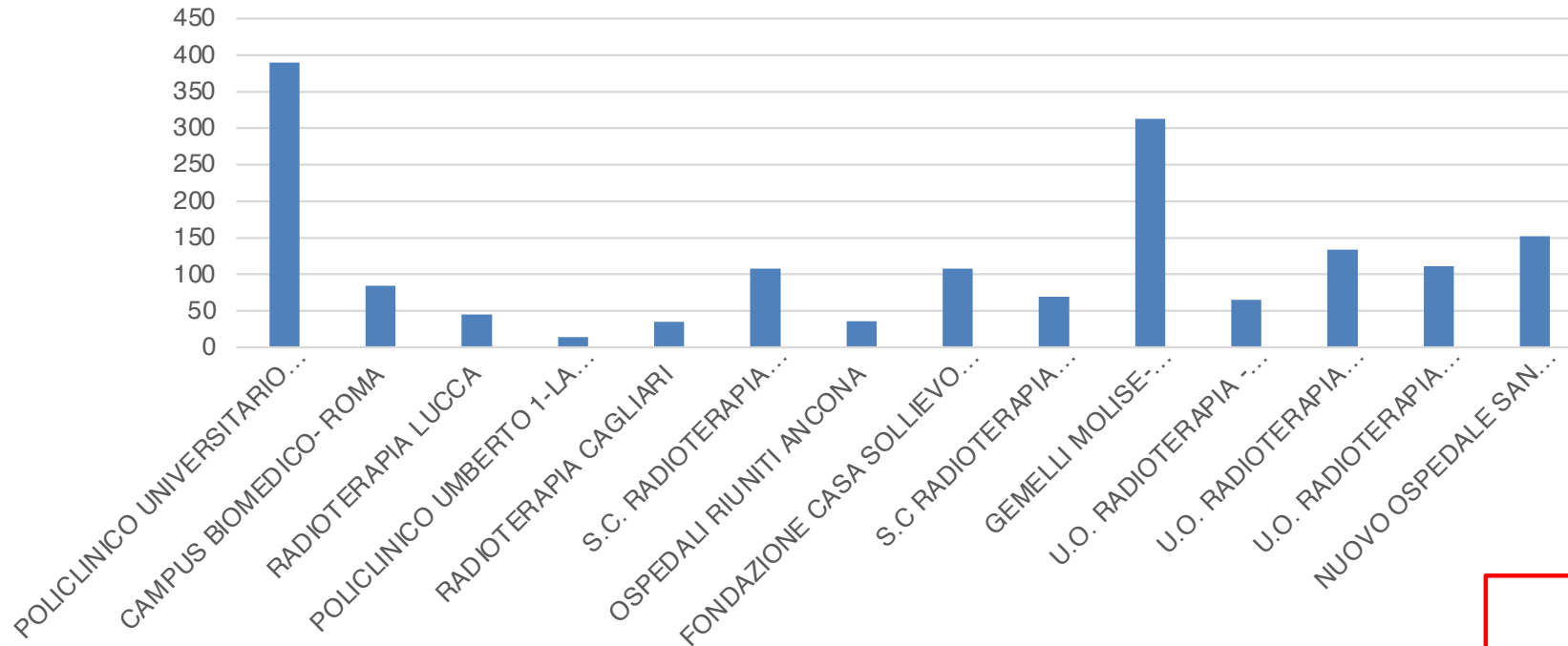
- Trattamento tra il gennaio 2010 e dicembre 2019
- Almeno 12 mesi di follow up

### DATA:

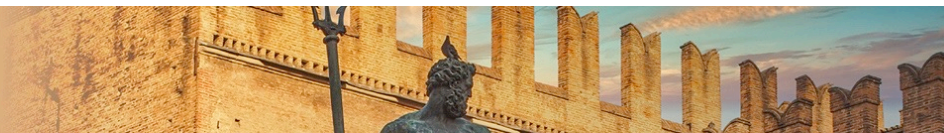
- Stadiazione e caratteristiche istologiche
- Dati EBRT e BRT (volumi e dosi per T ed N, durata)
- CT
- Tossicità
- Outcomes (recidiva – metastasi – sopravvivenza)



## RESULTS



**14 CENTRI  
TOT PZ: 1676**

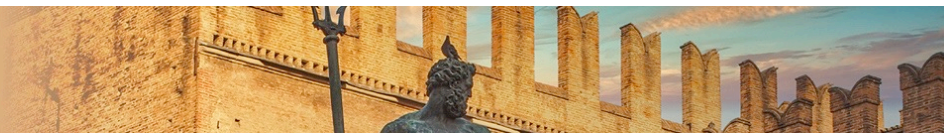


## RESULTS

<b>pT</b>	1	16 (1%)
	1a	261 (15,6%)
	1b	709 (42,3%)
	1c	151 (9%)
	II	234 (14%)
	IIa	30 (1,8%)
	IIb	57 (3,4%)
	IIc	0
	III	20 (1,2%)
	IIIa	88 (5,3%)
	IIIb	53 (3,2%)
	IIIc	45 (2,7%)
	IV	1 (0,1%)
	NA	11 (0,7%)
<b>pN</b>	0	1060 (63,2%)
	1	196 (11,7%)
	2	20 (1,2%)
	NA	400 (23,9%)
	<b>pM</b>	Yes
No		1135 (67,7%)
NA		531(31,7%)

### PATIENTS' CHARACTERISTICS

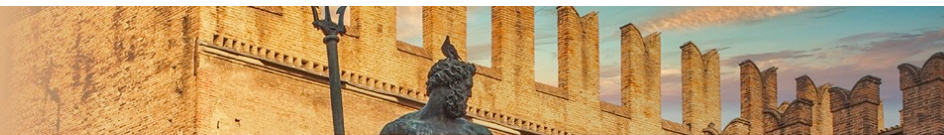
<b>Age (Mean)</b>	57 (27-88)
<b>BMI (Mean)</b>	31,5 (16-47)
<b>MDT Discussion</b>	
<b>Yes</b>	657 pz (39.2 %)
<b>No</b>	390 pz (23.3%)
<b>NA</b>	629 pz (37.5%)



## RESULTS

<b>Histology</b>	
<i>Endometrial endometrioid Adenocarcinoma</i>	1429 (85,3%)
<i>Endometrial Non Endometrioid Adenocarcinoma</i>	243 (14,4%)
NA	4 (0,2 %)
<b>Grading</b>	
G1	172 (10,3%)
G2	901 (53,8%)
G3	549 (32,8%)
NA	54 (3,2%)
<b>LVSI</b>	
Positive	538 (32,1%)
-Focal 147 (8,8)	
-Diffuse 225 (13,4%)	
-NA 1304 (77,8%)	
Negative	751 (44,8%)
NA	387 (23,1%)

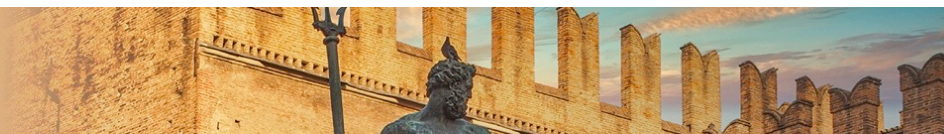




## TREATMENTS' CHARACTERISTICS

## RESULTS

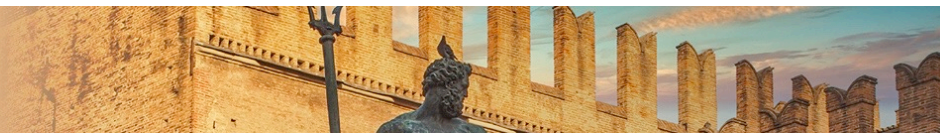
<b>Chirurgia T</b>	
Simple/Extrafascial Hysterectomy (Type A)	420 (25,1%)
Modified Radical Hysterectomy (Type B)	112 (6.7%)
Radical Hysterectomy (Type C)	820 (48.9%)
Other	9 (0.6%)
NA	315 (18.8%)
<b>Chemotherapy</b>	
Yes	526 (31,4%)
	-Carbotaxolo 409 (24,4%)
	-Other 83 (5%)
	-NA 1184 (70,6%)
No	1096 (65,4%)
NA	54 (3.2%)



## RESULTS

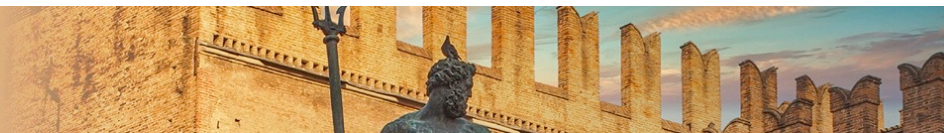
Radiotherapy		
EBRT		152 (9 %)
EBRT + BOOST EBRT sequenziale		16 (0.95 %)
EBRT + BOOST EBRT concomitante		320 (19,0 %)
EBRT + IRT		710 (42,3 %)
IRT ESCLUSIVA		478 (28,5%)

Brachytherapy		488 (30%)
NO		
YES		1188 (70%)
	LDR	114 (6,8%)
	HDR	1057 (63%)
	PDR	17 (1%)



## RESULTS

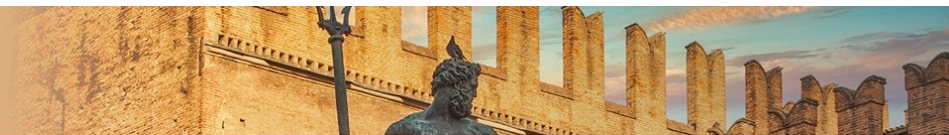
TYPE OF TREATMENT	N°	Radiotherapy Dose
<b>EBRT</b>	152	EBRT DOSE, MEDIAN <b>46 Gy</b> (RANGE 32.4-54 Gy)
<b>EBRT + BOOST EBRT SEQ</b>	16	EBRT DOSE, MEDIAN <b>45 Gy</b> (RANGE 45-50 Gy)  EBRT BOOST DOSE, MEDIAN <b>18 Gy</b> (RANGE 14-19.8 Gy)
<b>EBRT + BOOST ERT CONC</b>	318	EBRT DOSE, MEDIAN <b>45 Gy</b> (RANGE 45-50 Gy)  EBRT BOOST DOSE, MEDIAN <b>50 Gy</b> (RANGE 55-60 Gy)
<b>EBRT + IRT</b>	709	EBRT DOSE, MEDIAN <b>45 Gy</b> (RANGE 23.4-60 Gy)  IRT BOOST DOSE, MEDIAN <b>10 Gy</b> (RANGE 4-20 Gy)
<b>IRT</b>	481	IRT DOSE, MEDIAN <b>21 Gy</b> (RANGE 10-60 Gy)



## RESULTS

### ACUTE TOXICITY

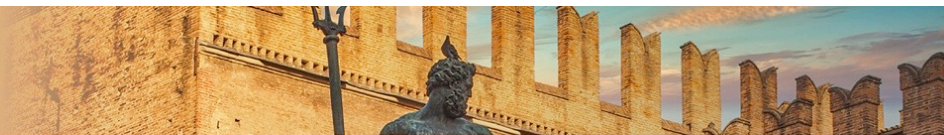
	ALL	EBRT	EBRT + BOOST EBRT SEQ	EBRT + BOOST ERT CONC	EBRT + IRT	IRT
<b>ACUTE TOX TOT</b>	1002	122	10	269	485	116
<b>ACUTE TOX GI</b>						
G0	911	49	5	100	337	420
G1	490	67	9	140	251	23
G2	212	28	1	72	109	2
G3	16	3	0	4	8	1
G4	2	0	0	2	0	0
<b>ACUTE TOX GU</b>						
G0	1074	92	15	161	461	345
G1	454	51	0	106	204	93
G2	104	5	0	51	38	10
G3	4	0	0	2	1	1
G4	0	0	0	0	0	0
<b>ACUTE TOX HEMATO</b>						
G0	1417	137	14	255	578	433
G1	139	9	0	40	78	12
G2	61	1	1	23	36	0
G3	7	1	0	2	4	0
G4	0	0	0	0	0	0
<b>ACUTE TOX SKIN</b>						
G0	1332	135	13	174	598	412
G1	212	8	2	91	81	30
G2	73	3	0	47	21	2
G3	2	0	0	1	1	0
G4	1	0	0	1	0	0



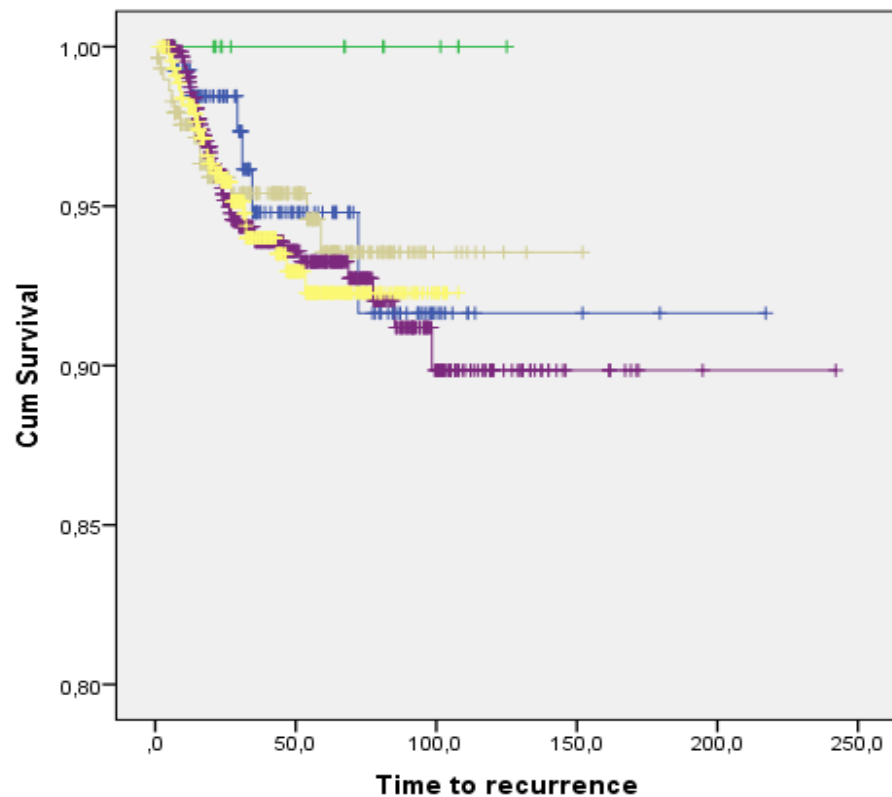
## RESULTS

### LATE TOXICITY

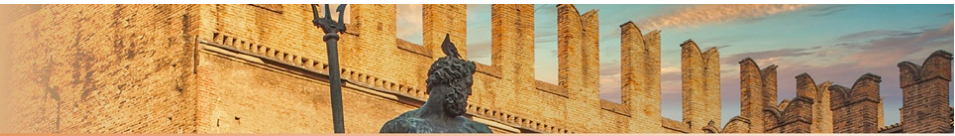
<b>LATE Toxicity</b>		
Yes		629 (37,5%)
No		746 (44,5%)
NA		301 (18%)
<b>LATE Toxicity</b>		
G0		748 (44,6%)
G1		283 (16,9%)
G2		119 (7,1%)
G3		37 (2,2%)
NA		489 (29,2%)
<b>Vaginal Stenosis</b>		
Yes		1024 (61,1%)
No		237 (14,1%)
NA		415 (24,8%)



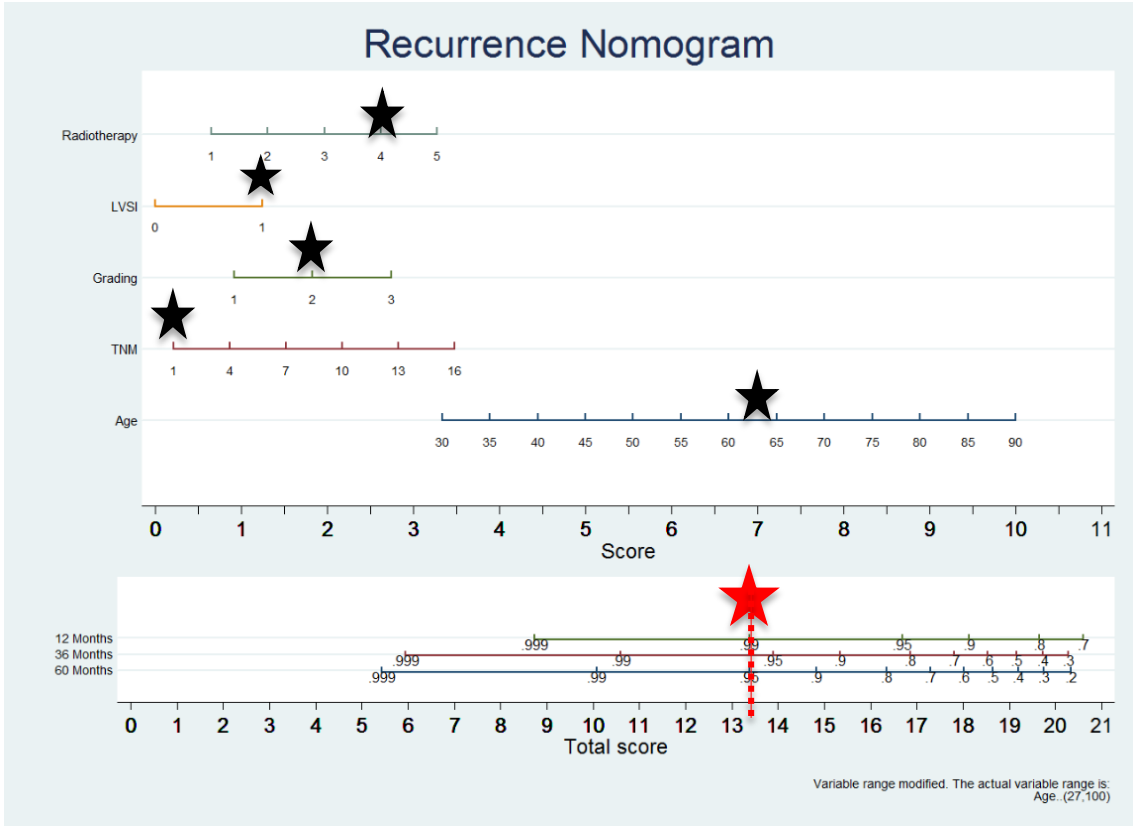
## Survival Functions

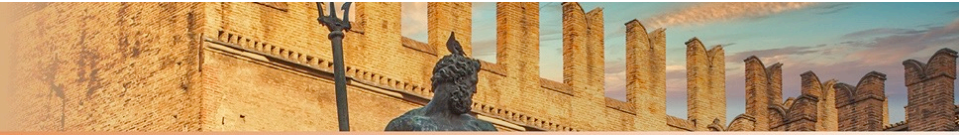


1. EBRT
2. EBRT + BOOST EBRT SEQ
3. EBRT + BOOST EBRT CONC
4. EBRT + IRT
5. IRT



## RESULTS





## CONCLUSION

- ❑ A large multidimensional database allowed the creation of a multifactorial LC prediction model
- ❑ An external validation could be useful to confirm the robustness of the model for a possible clinical application for a personalized approach
- ❑ Future Directions:

Toxicity Nomograms

Prospective data collection

Molecular Data

External Validation