

XXXII CONGRESSO NAZIONALE AIRO
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AIRO2022

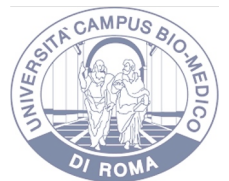
Radioterapia di precisione per un'oncologia innovativa e sostenibile

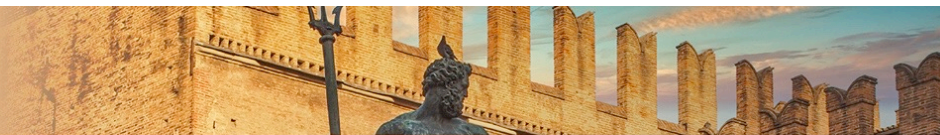
BOLOGNA, 25-27 NOVEMBRE
PALAZZO DEI CONGRESSI

Stereotactic body radiotherapy with concurrent CDK4/6 inhibitors for oligorecurrent/oligoprogressive breast cancer patients

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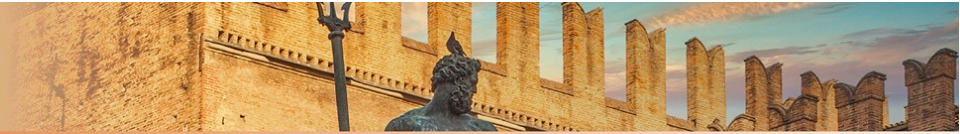
DICHIARAZIONE

Relatore: ELENA ONORATI

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





Background: local therapies in oligometastatic patients

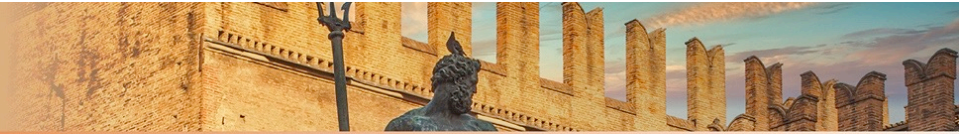
Oligometastatic disease (OMD): An intermediate state between local and systemic disease, where radical local treatment of the primary cancer and all metastatic lesions might have a curative potential.

Oligorecurrent OMD: Metastases detected while the primary tumour is controlled and that can be treated with local therapy.

Oligoprogressive OMD: Few lesions progress on a background of widespread but stable metastatic disease.

The oligometastatic paradigm hypothesizes that patients with a limited number of metastases may achieve long-term disease control, or even cure, if all sites of disease can be ablated.

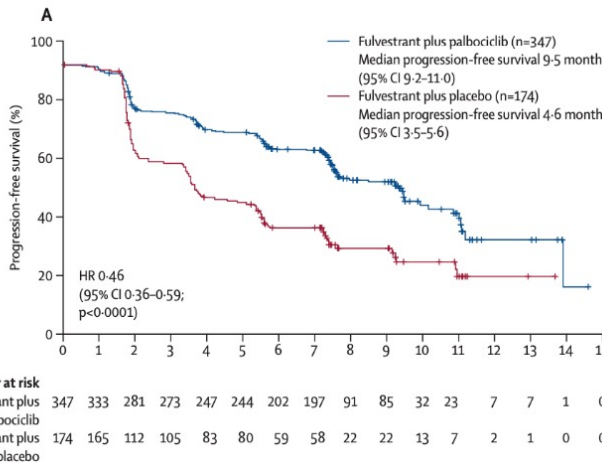




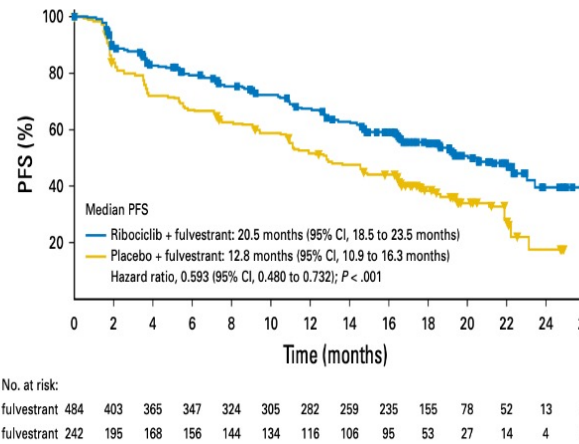
Background: CDK4/6 inhibitors in association with anti-oestrogen therapy

3 RANDOMIZED TRIALS:

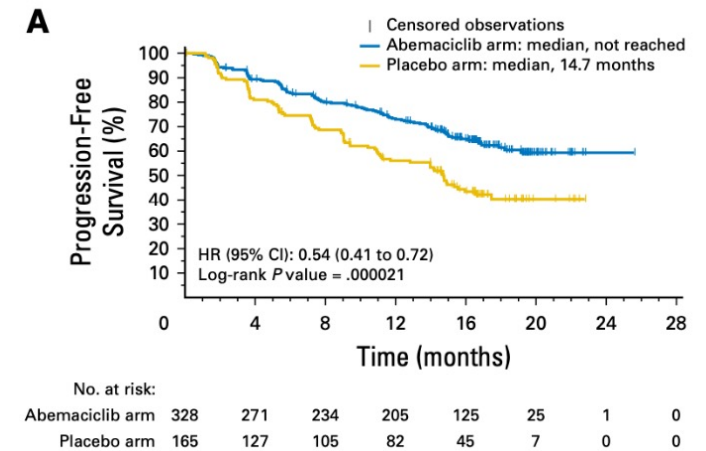
- **Paloma-3** (Cristofanilli, Lancet 2016)
- **Monaleesa-3** (Slamon, Journal of Clinical Oncology 2018)
- **Monarch-3** (Goetz, Journal of Clinical Oncology 2017)



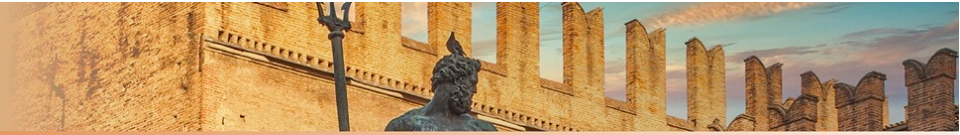
Palbociclib



Ribociclib



Abemaciclib

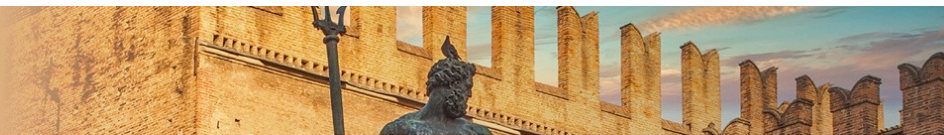


Methods

The aim of the study is to evaluate the efficacy and the safety of concurrent SBRT with CDK4/6 inhibitors in stage IV breast cancer patients.

- We reviewed clinical records of metastatic breast cancer patients treated with SBRT to oligoprogressive/oligorecurrent lesions.
- Toxicities were measured according to *CTCAE v 4.0 grading scale*.
- Lesions' response was evaluated according to *RECIST/PERCIST criteria*.
- *PFS* was evaluated from SBRT to local or systemic failure.

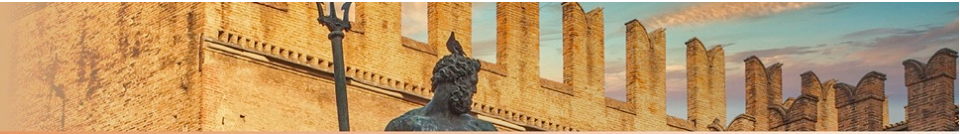




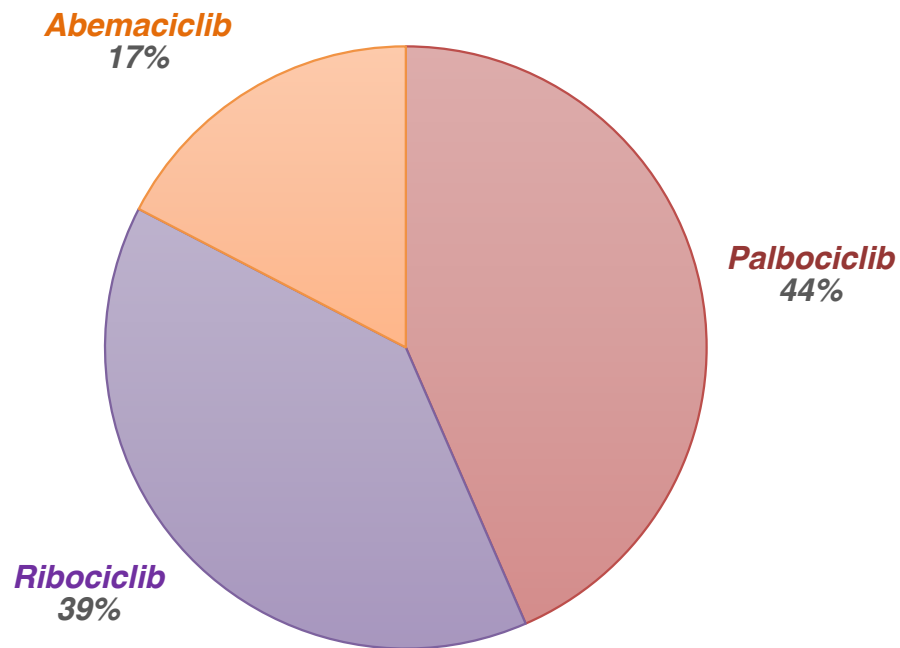
Patients' characteristics

<u>Enrollment</u>	January 2019 – April 2022
<u>Number of patients</u>	23
<u>Gender (Male:Female)</u>	2:21
<u>Age (Mean range)</u>	62 years (38-86)
<u>Number of lesions</u>	50
<u>Site of lesions</u>	Bone metastasis (58%) Brain metastasis (16%) Visceral metastasis (26%)





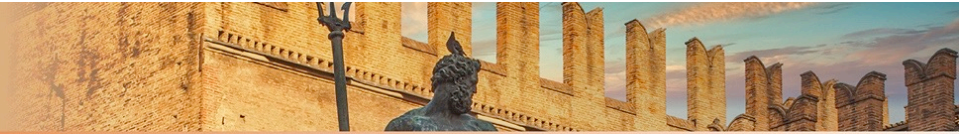
Concurrent CDK 4/6 inhibitors



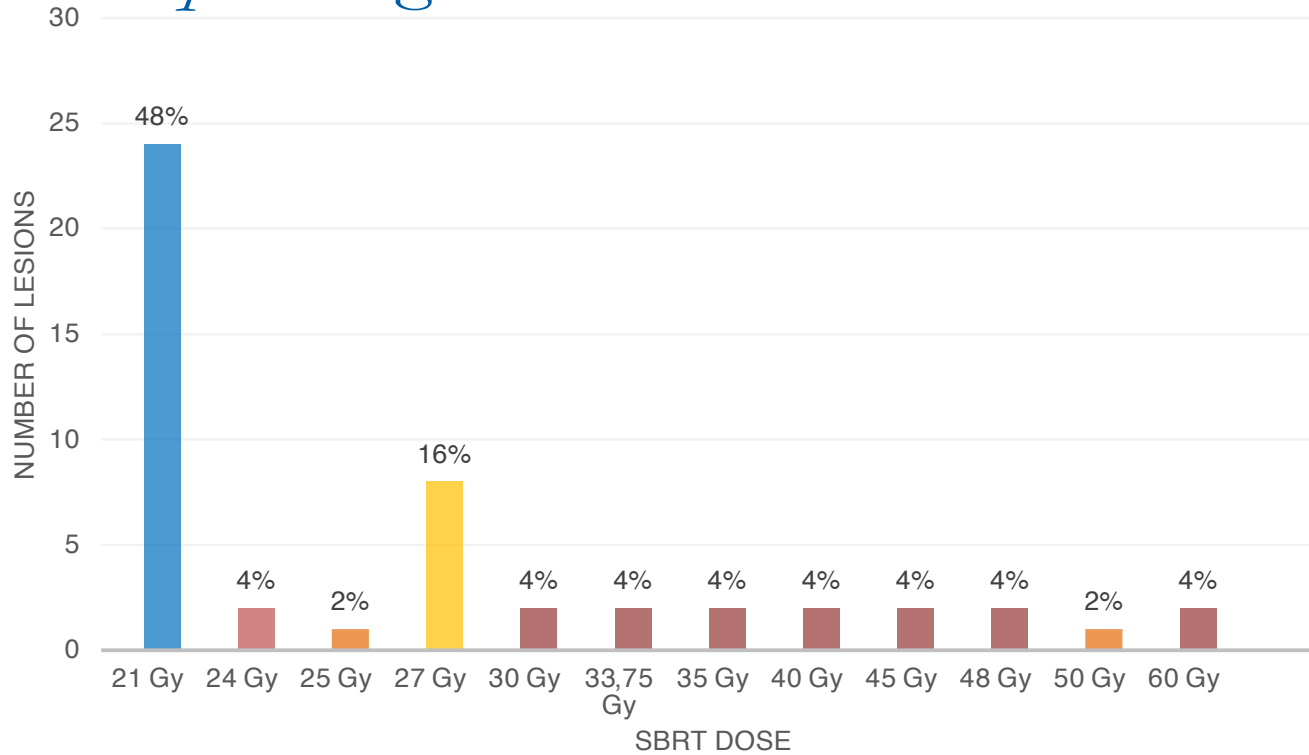
Only two toxicities were observed:

- **G1 dysphagia**
 (Ribociclib + SBRT to a cervical spine lesion)
- **G3 neutropenia**
 (Palbociclib + SBRT to a central lung lesion)



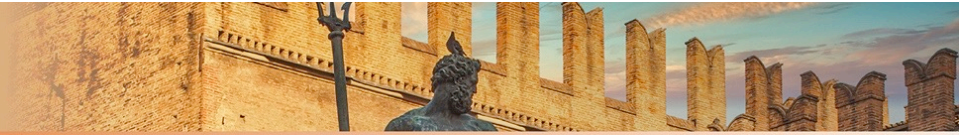


SBRT planning



Mean Biological Effective Dose (BED) delivered (alpha/beta=4 Gy) was 89.3.





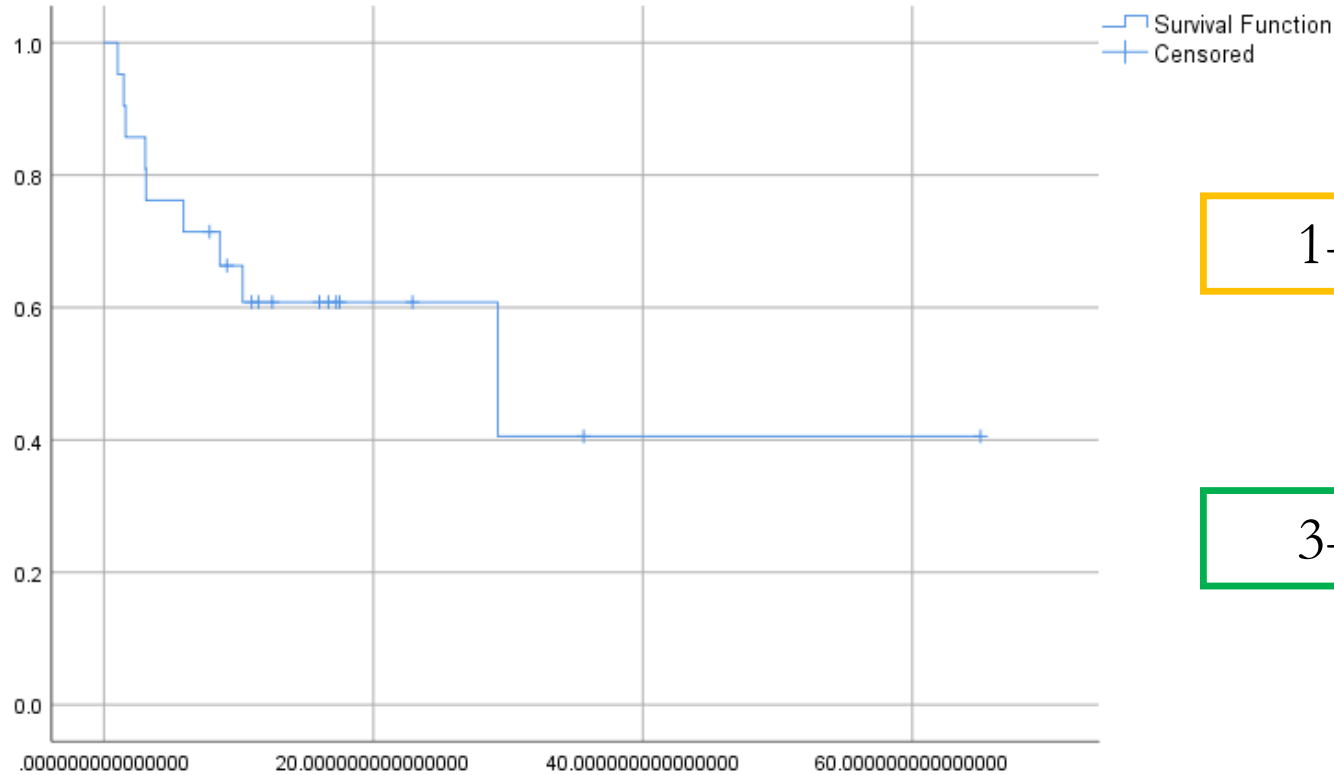
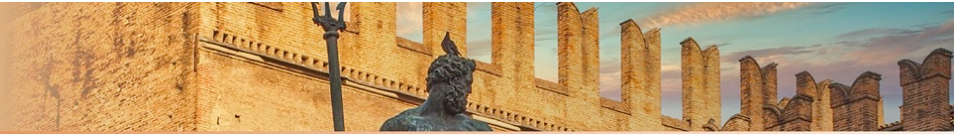
Results

Median FUP was **15 months** (range 2-65 months).

All lesions were evaluable for response:

- **No** patients experienced **local failure** on sites treated with SBRT
- Response was evaluated on a **per lesion basis**
- **Complete response** was achieved in 19 sites (**38%**)
- **Partial response** was observed in 17 sites (**34%**).



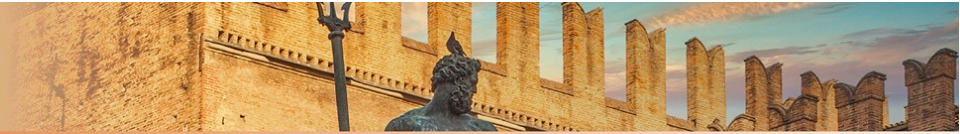


1-year PFS = 16.8%

3-year PFS = 30.5%

Mean duration of anti-CDK4/6 therapy after SBRT was 17.6 ± 13.9 months.





Conclusion

SBRT for oligoprogressive/oligorecurrent breast cancer metastases delivered concurrently with CDK4/6 inhibitors seems safe and effective and should be tested in prospective studies.

