

# PHOTOBIOMODULATION THERAPY TO TREAT A RARE PHENOMENON OF RADIATION **RECALL REACTION IN A PATIENT WITH CERVICAL CANCER: A CASE REPORT**

Paloma Gomes<sup>1</sup>; Elaine Barros Ferreira<sup>1</sup>; Paula Elaine Diniz dos Reis<sup>1</sup>\* <sup>1</sup>University of Brasília, Faculty of Health Sciences, Interdisciplinary Research Laboratory Applied to Clinical Practice in Oncology – LIONCO, Brazil \*Corresponding author: pauladiniz@unb.br

#### Introdution

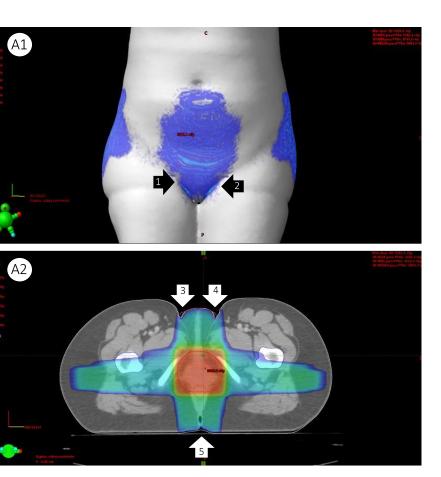
- Radiation Recall Reaction (RRR) is characterized by an acute inflammatory response
- Occurs in tissue previously exposed to radiotherapy (RT)
- It is a rare and poorly understood phenomenon [1-10]

## Methods

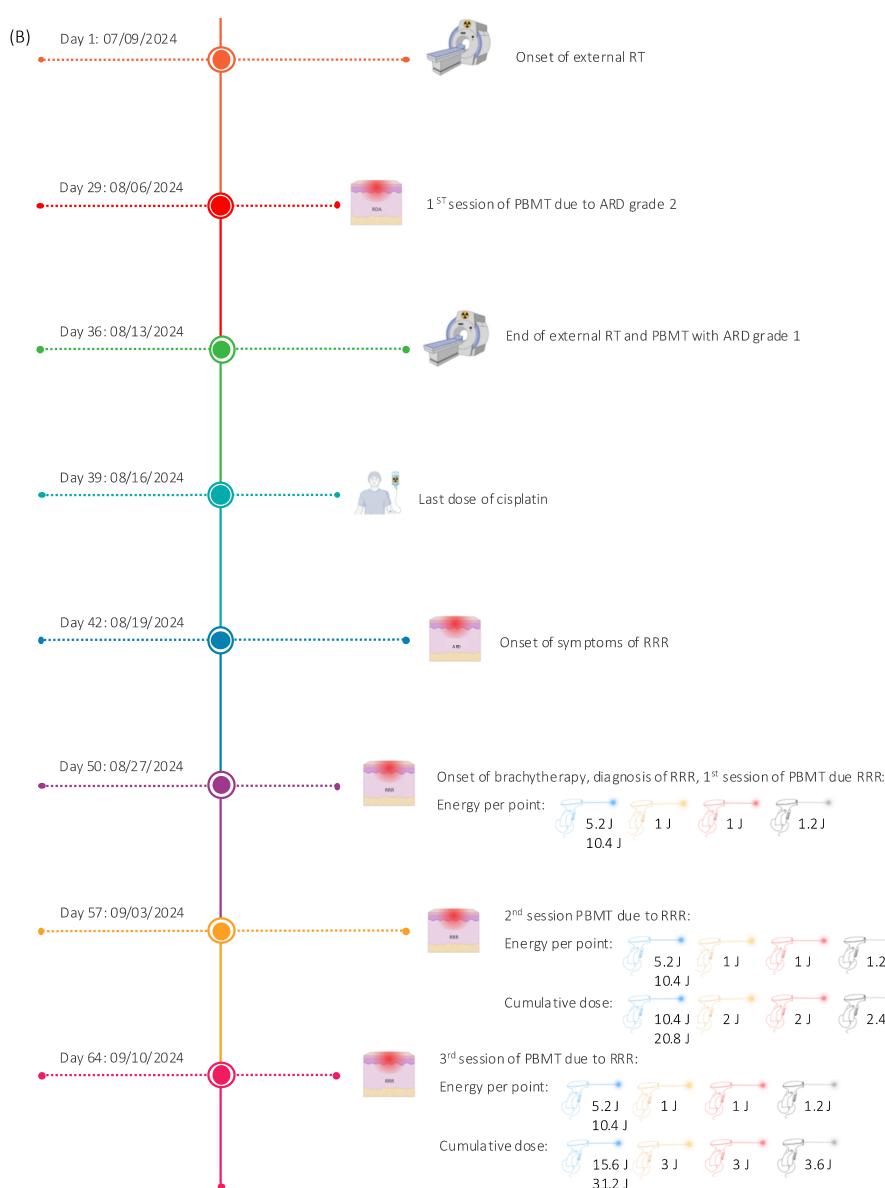
- Case report
- CARE guideline [11]

- A 36-years-old Brazilian woman with cervical cancer
- Treated with RT and chemotherapy
- Diagnosed with RRR affecting the vaginal and anal mucosa and skin of the inguinal region
- Triggered by cisplatin
- RRR treated with photobiomodulation therapy (PBMT)

#### **Case Report**



(A1) RT plan in the coronal plane (A2) RT plan in the sagital plane





(A3) Dry desquamation in the inguinal region fully healed after 1<sup>st</sup> session of PBMT

(B) Patient timeline from the start of RT to the last PBMT session

### Conclusion

This case report suggested that PBMT can be a safe, non-invasive, low-cost, nonthermal alternative treatment to RRR

• Further clinical studies are needed











