

## Accepted Manuscript

Title: Emerging biomarkers for the combination of radiotherapy and immune checkpoint blockers

Authors: Claire Lhuillier, Claire Vanpouille-Box, Lorenzo Galluzzi, Silvia Chiara Formenti, Sandra Demaria



PII: S1044-579X(17)30252-3  
DOI: <https://doi.org/10.1016/j.semcancer.2017.12.007>  
Reference: YSCBI 1427

To appear in: *Seminars in Cancer Biology*

Received date: 5-10-2017  
Revised date: 11-12-2017  
Accepted date: 13-12-2017

Please cite this article as: Lhuillier Claire, Vanpouille-Box Claire, Galluzzi Lorenzo, Formenti Silvia Chiara, Demaria Sandra. Emerging biomarkers for the combination of radiotherapy and immune checkpoint blockers. *Seminars in Cancer Biology* <https://doi.org/10.1016/j.semcancer.2017.12.007>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# Emerging biomarkers for the combination of radiotherapy and immune checkpoint blockers

Claire Lhuillier<sup>1</sup>, Claire Vanpouille-Box<sup>1</sup>, Lorenzo Galluzzi<sup>1,2</sup>, Silvia Chiara Formenti<sup>1,2</sup> and  
Sandra Demaria<sup>1,2,3,\*</sup>

<sup>1</sup>Department of Radiation Oncology, Weill Cornell Medical College, New York, NY, USA; <sup>2</sup>Sandra and Edward Meyer Cancer Center, New York, NY, USA; <sup>3</sup>Department of Pathology and Laboratory Medicine, Weill Cornell Medical College, New York, NY, USA.

## Correspondence to:

**Dr. Sandra Demaria.** Weill Cornell Medical College, Stinch Radiation Oncology, 525 East 68th Street, Box #169, New York, NY 10065, USA; Phone: +1(212)746-3600; Fax: +1(212)746-7815; E-mail: [szd3005@med.cornell.edu](mailto:szd3005@med.cornell.edu)

**Running title:** Predicting clinical responses to radiotherapy plus immunotherapy with ICBs.

**Keywords:** DNA damage response; mutational load; natural killer cells; PD-L1; type I interferon.

**Abbreviations:** CTC, circulating tumor cell; CTL, cytotoxic T lymphocyte; DC, dendritic cell; DDR, DNA damage response; DSB, double-strand break; dsDNA, double-stranded DNA; FDA, Food and Drug Administration; ICB, immune checkpoint blocker; IFN, interferon; IHC, immunohistochemistry; IRDS, IFN-related DNA damage resistance signature; MMR, mismatch repair; MSI, microsatellite instability; NK, natural killer; NSCLC, non-small cell lung carcinoma; RCD, regulated cell death; RT, radiation therapy.

Download English Version:

<https://daneshyari.com/en/article/10156993>

Download Persian Version:

<https://daneshyari.com/article/10156993>

[Daneshyari.com](https://daneshyari.com)