

Contents lists available at ScienceDirect

Gynecologic Oncology Reports

journal homepage: www.elsevier.com/locate/gynor

Correspondence

Letter to the editor, Reply to: Lee and Matulonis: Immunotherapy and radiation combinatorial trials in gynecologic cancer: A potential synergy?



Patients will be randomized 1:1 to receive either durvalumab intravenously [IV]) or placebo every 4 weeks. All patients will receive cisplatin or carboplatin administered concurrently with external beam radiation therapy plus brachytherapy. Randomization is stratified by disease stage (FIGO Stage < Ill and N positive, Stage \geq III and N negative, or FIGO Stage \geq III and N positive) and region (US, Canada, EU, South Korea, and Japan versus the rest of the world). The primary endpoint is investigator-assessed progression-free survival (per RECIST v1.1 or histopathologic confirmation of local tumor progression). Secondary endpoints are overall survival, objective response and complete response rates, duration of response in patients with a complete response, incidence of local or distant disease progression or secondary malignancy, disease-related symptoms, and health-related quality of life (EORTC QLQ-C30 and EORTC QLQ-CX24). Pharmacokinetics, immunogenicity, and safety of durvalumab will also be assessed. Patient enrollment is ongoing.

The clinical activity associated with potentiating the proinflammatory effects of CCRT suggests that administering durvalumab in combination with CCRT may have clinical benefits, including increasing the response rate to CCRT, improving the complete response rate, and decreasing the number of patients who progress on CCRT. Safety observations in other tumor types have demonstrated that concurrent administration of CCRT and immunotherapy has generally been well tolerated (Chao et al., 2018; Jabbour et al., 2018; Powell et al., 2018). The safety of administration of durvalumab and CCRT, for example, is supported by results from the PACIFIC study, which showed that durvalumab administered within 42 days of completion of CCRT had a well-tolerated and manageable safety profile that was consistent with the established safety profile to date (Antonia et al., 2017). Therefore, the CALLA trial was commenced to evaluate the efficacy and safety of concurrent administration of durvalumab and CCRT in patients with cervical cancer.

Acknowledgements

The CALLA trial is supported by AstraZeneca. Medical writing support, in accordance with Good Publication Practice (GPP3) guidelines, was provided by Edwin Thrower, PhD, of Parexel (Hackensack, NJ, USA) and was funded by AstraZeneca.

Author contributions

All authors equally contributed to this manuscript.

References

- Antonia, S.J., Villegas, A., Daniel, D., Vicente, D., Murakami, S., Hui, R., et al., 2017. Durvalumab after chemoradiotherapy in stage III non-small-cell lung cancer. N. Engl. J. Med. 377 (20), 1919–1929.
- Chao, J., Hou, W., Chen, Y.-J., Chen, H., Tajon, M., Fakih, M., et al., 2018. High-dimensional flow cytometry of circulating immune cells predicts clinical responses to combination immune checkpoint blockade (ICB) and radiotherapy (RT) in gastroesophageal cancer (GEC). J. ImmunoTher. Cancer 6 (Suppl 1), P26.
- Jabbour, S., Berman, A., Decker, R., Zloza, A., Feigenberg, S., Gettinger, S., et al., 2018. PD-1 Blockade with pembrolizumab during concurrent chemoradiation for locally advanced non-small cell lung cancer. J. ImmunoTher. Cancer 6 (Suppl 1), P319.
- Johnson, C.B., Jagsi, R., 2016. The promise of the abscopal effect and the future of trials combining immunotherapy and radiation therapy. Int. J. Radiat. Oncol. Biol. Phys. 95 (4), 1254–1256.
- Lee, L., Matulonis, U., 2019. Immunotherapy and radiation combinatorial trials in gynecologic cancer: a potential synergy? Gynecol. Oncol. 154 (1), 236–245.
- Monk, B.J., Mayadev, J., Nunes, A.T., Dabrowska Brown, A., Marcovitz, M., Lanasa, M.C., 2019. CALLA: Efficacy and safety of durvalumab with and following concurrent chemoradiotherapy (CCRT) versus CCRT alone in women with locally advanced cervical cancer: a phase III, randomized, double-blind, multicenter study. J. Clin. Oncol. 37 (suppl; abstr TPS5597) Accessed July 29, 2019. http://abstracts.asco.org/ 239/AbstView_239_268967.html.
- Powell, S.F., Gitau, M., Reynolds, J., Terrell, A., Lohr, M.M., McGraw, S., et al., 2018. Pembrolizumab in combination with chemoradiotherapy (CRT) in human papilloma virus (HPV)-associated head and neck squamous cell carcinoma (HNSCC). J. ImmunoTher. Cancer 6 (Suppl 1), 050.
- Sharabi, A.B., Tran, P.T., Lim, M., Drake, C.G., Deweese, T.L., 2015. Stereotactic radiation therapy combined with immunotherapy: augmenting the role of radiation in local and systemic treatment. Oncol. (Williston Park) 29 (5), 331–340.

https://doi.org/10.1016/j.gore.2019.100506

Received 23 September 2019; Accepted 29 September 2019

Available online 10 October 2019

2352-5789/ © 2019 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/BY-NC-ND/4.0/).

Correspondence

^c Director of Gynecologic Brachytherapy, Chief, Gynecology Oncology Radiation Services, University of California, San Diego, 3855 Health Sciences Drive, La Jolla, CA 92093, USA ^d AstraZeneca, 950 Wind River Ln, Gaithersburg, MD 20878, USA E-mail addresses: Bradley.monk@usoncology.com (B.J. Monk), jyoti.mayadev@ucsd.edu (J. Mayadev), ana.nunes2@astrazeneca.com (A.T. Nunes).

Bradley J. Monk^{a,b,*}, Jyoti Mayadev^c, Ana T. Nunes^d

 ^a Division of Gynecologic Oncology, Arizona Oncology (US Oncology Network), University of Arizona College of Medicine, Creighton University School of Medicine at St. Joseph's Hospital Phoenix, AZ, USA
^b US Oncology Research Network - Gynecologic Program, 2222 E. Highland Avenue, Suite 400, Phoenix, AZ 85016, USA

^{*} Corresponding author at: Division of Gynecologic Oncology, Arizona Oncology (US Oncology Network), University of Arizona College of Medicine, Creighton University School of Medicine at St. Joseph's Hospital Phoenix, AZ, USA.