Safety & efficacy of adoptive cell transfer using autologous tumor infiltrating lymphocytes (LN-145) for recurrent, metastatic, or persistent cervical carcinoma

Background

- There is a high unmet medical need for effective treatments for patients with recurrent, metastatic, or persistent cervical cancer.

- Cervical cancer is a leading cause of cancer-related deaths in women, with over 12,000 new cases and 4,000 deaths in the US alone.

- Most patients are young and survival rates are poor.

- Several early studies have demonstrated the feasibility of isolation and culture of TIL from cervical tumors.

- The authors would like to acknowledge the support and dedication of all site team members from all the clinical trial institutions.

Methods

- Enrollment: 27 patients diagnosed with recurrent or persistent cervical carcinoma

- Treatment: LN-145 TIL therapy

- Response assessment: RECIST v1.1

- Primary endpoint: Objective Response Rate (ORR)

- Secondary endpoints: Duration of response, time to first response, mean time to best response, etc.

- Fast Track and Breakthrough designations

- No premedication a given

- Mean number of TIL cells infused: 28 x 10^9

- Mean number of target and non-target lesions (at baseline): Min, Max 10, 165

- In previously treated cervical cancer patients, LN-145 TIL therapy results in:

- - Acceptable safety and efficacy profile
- - Mean number of TIL cells infused: 28 x 10^9
- - Mean number of target and non-target lesions (at baseline): Min, Max 10, 165
- - Median Duration of Response (DOR): 20 (28.56)

- LN-145 autologous TIL has demonstrated potential efficacy for patients with cervical carcinomas and represents a viable therapeutic option warranting further investigation.

Conclusions

- There is a high unmet medical need for effective treatments for patients with recurrent, metastatic, or persistent cervical cancer.

- In previously treated cervical cancer patients, LN-145 TIL therapy results in:

  - Acceptable safety and efficacy profile
  - Mean number of TIL cells infused: 28 x 10^9
  - Mean number of target and non-target lesions (at baseline): Min, Max 10, 165
  - Median Duration of Response (DOR): 20 (28.56)

- LN-145 autologous TIL has demonstrated potential efficacy for patients with cervical carcinomas and represents a viable therapeutic option warranting further investigation.

Disclosures

- The authors would like to acknowledge the support and dedication of all site team members from all the clinical trial institutions.

- All authors meet the criteria for authorship set forth by the International Committee for Medical Journal Editors.

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