A window-of-opportunity study with atezolizumab and the oncolytic virus pelareorep in early Breast Cancer (AWARE-1)

Luís Manso1, Fernando Pastorelli1, Patricia Villafuerte1, Nuria Ch1, Bogota Bempe1, Juan Miguel Cejalvo1, Yarm Izartzungua1, Blanca Carroz1, Sakadur Blanch1, Mireia Margal1, José Luis Alonso1, Alejandro Martínez1, Rafael Villanueva1, Juan Antonio Guerra1, Raquel Andrés1, Pilar Zamora1, Esteban Nogales2, Manel Juan2, Blanca González-Parell3, Esther Santiveri4, Thomas C. Harder5, Patricia Sousa5, Richard Kucharczuk6, Gary Wilkinson7, Haura Loghmani1, Matt Coffey1, Ainoa González8,9, Deborah Martinez9, Luis Paní1, Tomás Pasqual1, Xavier González1, Alex Prat1,10

BACKGROUND

- Pelareorep (pel) is an oncolytic virus (OV) delivered and systematically available oncolytic reovirus that can replicate in tumor tissue and induce a T cell infiltrated phenotype.
- Pelareorep selectively infects cancer cells leading to tumor cell lysis. The virus also mediates anti-tumor responses through immune responses as the immune system becomes activated.
- We hypothesize that pelareorep-mediated immune responses will boost anti-PD-1 responses.

RESULTS

- Pelareorep mechanism of action: Pelareorep selectively infects cancer cells leading to tumor cell lysis. The virus also mediates anti-tumor responses through immune responses as the immune system becomes activated.
- Pelareorep selectively infects cancer cells leading to tumor cell lysis. The virus also mediates anti-tumor responses through immune responses as the immune system becomes activated.
- Pelareorep selectively infects cancer cells leading to tumor cell lysis. The virus also mediates anti-tumor responses through immune responses as the immune system becomes activated.

STUDY DESIGN & METHODS

- AWARE-1 is a window-of-opportunity study to evaluate the safety and effect of pel's atezolizumab on the tumor microenvironment (TME) in 38 women with early breast cancer.

CONCLUSION

- Changes in CD8+ T cell infiltration
- T cell Repertoire Turnover By Cohort
- Pelareorep upregulates PD-L1 expression in the VENTANA (SP142) and 28-6 Assay
- Pelareorep upregulates PD-L1 expression in the VENTANA (SP142) and 28-6 Assay
- Pelareorep upregulates PD-L1 expression in the VENTANA (SP142) and 28-6 Assay
- Pelareorep upregulates PD-L1 expression in the VENTANA (SP142) and 28-6 Assay
- Pelareorep upregulates PD-L1 expression in the VENTANA (SP142) and 28-6 Assay

STUDY OBJECTIVES

- Primary objective: to evaluate atezolizumab in 31 women following initiation of treatment in each cohort.
- Secondary objective: to evaluate immunological changes within the tumor and peripheral blood.

Changes in CD8+ T cell infiltration
- T cell Repertoire Turnover By Cohort
- Pelareorep upregulates PD-L1 expression in the VENTANA (SP142) and 28-6 Assay
- Pelareorep upregulates PD-L1 expression in the VENTANA (SP142) and 28-6 Assay
- Pelareorep upregulates PD-L1 expression in the VENTANA (SP142) and 28-6 Assay
- Pelareorep upregulates PD-L1 expression in the VENTANA (SP142) and 28-6 Assay
- Pelareorep upregulates PD-L1 expression in the VENTANA (SP142) and 28-6 Assay

REFERENCES


- REFERENCES
- REFERENCES
- REFERENCES
- REFERENCES
- REFERENCES