A Novel IL-2 Cytokine Immune Agonist (NKTR-214) Increases Proliferating CD8+ T Cells and PD-1 Expression on Immune Cells in the Tumor Microenvironment in Patients with Prior Checkpoint Therapy

Chantale Bermandiz,1, Salih Eideh Bermandiz,2 Michael E. Huenek,3 Casey L. Hapgood,3 hamstring M. W. Kruger,4 Michael T. Tetaff,5 Natalie Jackson,4 Ivan George,4 Mary Ann Tagliabue,2 Jonathan Zalevskey,4 Una Hoch,4 Christi Fanto,6 Ernesto Iaccocii,6 Sandra Arung,6 Michael Imperato,7 Ei Jizer,8 Iris Smalberg,9 Brendan D. Coyle,9 Nizar M. Tanri,9 Patrick Heu,9 Mario Smeo,9 Adi Diab10

1The University of Texas MD Anderson Cancer Center, Houston, TX; 2Yale School of Medicine, New Haven, CT; 3Nektar Therapeutics, San Francisco, CA; 4Consultant, Los Angeles, CA; 5Providence Cancer Center and Earle A. Chiles Research Institute, Portland, OR

BACKGROUND

• NKTR-214 is a humanized bi-specific IL-2-Fc antibody that engages and enhances multiple immune pathways to provide a potent tolerogenic IL-2-like effect (IL-2R)

• with an enhanced safety profile compared to traditional IL-2 therapy (IL-2R)

• to activate and expand every CD8+ T cells and PD-1 expression on immune cells

• in patients with RCC who have failed prior anti-PD-1/PD-L1 therapy

RESULTS

Efficacy of Sequential Dosing With Nivolumab

NKTR-214 Microtherapy Study Patient Enrolment

Conclusions: NKTR-214 Potentially Augments PD-1+ Tumor Infiltrating T Cells andPD-1+CD8+ T Cells in RCC Patients

CONCLUSIONS

Robust Immune Activation in Patients Who Have Failed Prior Immunotherapy

EOT NKTR-214 POST Nivolumab

EOT NKTR-214 POST Nivolumab

FUTURE DIRECTIONS

1. NKTR-214 in combination with other immune modulators, including checkpoint inhibitors

2. NKTR-214 in combination with anti-PD-1/PD-L1 therapy

3. NKTR-214 in combination with cellular immunotherapies

4. NKTR-214 in combination with other cytokine-based therapies

REFERENCES

1. ASCO GU 2017 poster (see QR code below)


3. ASCO GU 2017 poster (see QR code below)

4. The authors would like to acknowledge the contribution of patients and their families, the dedicated efforts of the research team, and the ongoing support of the Nektar Therapeutics, San Francisco, CA.