Development of HER-2/neu (HER2)-specific T Cell Immunity in Patients with HER2-positive Inflammatory Breast Cancer (IBC) May Impact Prognosis

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INTRODUCTION

Peptide vaccines (n=18) Plasmid Vaccine (n=12) Combined (n=30)

- Vaccination with HER2 peptide-and DNA-based vaccines is well tolerated and able to elicit HER2-specific immunity.
- Both antigen-specific proliferation responses and IFN-γ responses were significant greater than pre-(baseline) values in patients receiving HER2 peptide and DNA vaccines:
  - HER2 peptides p<0.05
  - HER2 ICD protein domain (p=0.006)
  - HER2 ICD p<0.004 and HER2 ECD p=0.02 protein domains (overlapping peptide pools)

RESULTS

- Patients with IBC are able to generate HER2-specific T cell immunity after HER2 vaccination.
- Development of HER2-specific T cell immunity may improve survival in patients with HER2+ IBC.
- Multivariate analysis is currently being conducted to determine independent predictors of survival.

CONCLUSIONS

REFERENCES

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