**ABSTRACT**

SV-BR-1-GM is a whole-Cell Targeted Immunotherapy for Breast Cancer: Preliminary Clinical Data

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**METHODS**

Clinical Protocol WR-116-007 (ClinicalTrials.gov NCT03328026):

- **SV-BR-1-GM**: A whole cell-targeted immunotherapy prepared from a breast cancer cell line that expresses the secreted vacuolar ATPase (SV-ATPase) cell surface protein on the breast cancer cells.
- **HLA-DRB3*02:02**: DRB3 alleles are associated with breast cancer risk. The HLA-DRB3*02:02 allele is expressed on SV-ATPase.
- **Development**: The SV-ATPase molecule has been identified and characterized as a potential target for breast cancer immunotherapy.
- **Data Collection**: The study included data from 26 patients with metastatic breast cancer.

**RESULTS**

- **Patient Characteristics**:
  - Age: 70 to 83 years old
  - Metastatic Sites: Lymph nodes, brain, bone, cutaneous, etc.
  - Prior Regimens: Chemotherapy, hormonal therapy, etc.
  - # of Cycles: 1 to 6

- **Related Adverse Events**:
  - Grade 4 to 5: None
  - Grade 1 to 3: Fatigue, nausea, etc.

- **Tumor Response and HLA Type**:
  - HLA-DRB3*02:02 positive: 7 patients
  - HLA-DRB3*02:02 negative: 19 patients

- **Serious Adverse Events**:
  - None reported

- **DISCUSSION**

While encouraging results will be reported, the data implies the following:

1. SV-ATPase may be a potential target for breast cancer immunotherapy.
2. HLA-DRB3*02:02 may be a potential target for breast cancer immunotherapy.
3. Future studies will be needed to confirm these preliminary results.

**REFERENCES**