A Phase Ib study of NUC-1031 and carboplatin combination for patients with recurrent ovarian cancer

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BACKGROUND
- Resistance to chemotherapy reduces patient survival
- Limited effective treatment for recurrent ovarian cancer
- Requirement for new agents and combinations

PROTOCOL:
- Nucleotide Analogues
- Ovarian cancer drug resistance
- Combination of nucleoside analogues
- Innovative chemotherapy approach
- Broad clinical utility

NUC-1031: The First Anti-Cancer Protocol
- A new approach to transformation of nucleoside analogues
- Actives tumor is converted into nucleoside transporter
- Activation signal is not linked to the cell surface
- Greater stability
- Reduction in potential toxic metabolites

STUDY DESIGN
- Objectives
- Safety: Determine the recommended Phase II dose (RP2D) of NUC-1031 and carboplatin combination
- Efficacy: Objective response rates
- Introduction: Safety profile and tolerability
- Evaluate Objective response rates
- Evaluate progression-free survival
- Evaluate Pharmacokinetic Profile

METHODS
- Sequential dosing cohorts (3 × 3 design) with NUC-1031 administered on days 1, 8, and 15 with carboplatin on days 1, 8, and 15 every 28 days

RESULTS

NCT 0131: Phase Ia Study
- Strong efficacy signal including patients with ovarian cancer
- 90% Disease Control Rates (DCR) at 12 weeks
- Progressive Disease: 8 patients
- No unexpected Adverse Events (AE)
- manageable pharmacokinetics & transdermal pharmaceutical
- Genetrix inpatient trial of 10 patients

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PHARMACOKINETICS
- NUC-1031 PK profile consistent when administered in combination with carboplatin as a single agent (AUC = 170) or in combination with NUC-1031 (AUC = 200)
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CONCLUSIONS
- NUC-1031 + carboplatin combination
- Efficacy in platinum and non-platinum resistant patients
- DCR: 95%
- PFS: 6 months durable & ongoing
- Regimen is well tolerated
- No unexpected AEs
- PK data support positive interaction between agents
- High intracellular levels of active metabolite of NUC-1031
- ADP: NUC-1031 500 mg/m2 + carboplatin AUC5
- Focuses on platinum sensitive ovarian cancer