

# Phase 1 Dose-Escalation Study of STRO-002, an anti-Folate Receptor alpha (FR $\alpha$ ) Antibody Drug Conjugate (ADC), in Patients with Advanced Platinum-Resistant/Refractory Epithelial Ovarian Cancer (OC)

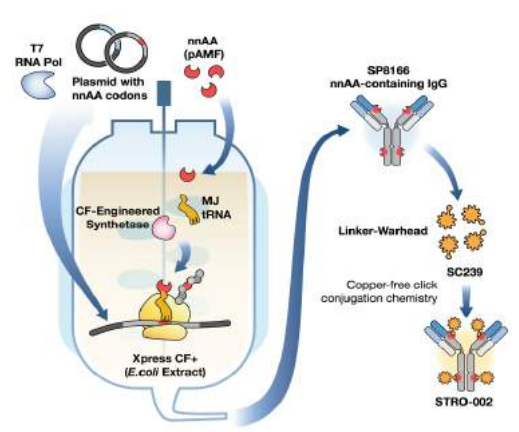
R. Wendel Naumann<sup>1</sup>, Fadi S. Braiteh<sup>2</sup>, John P. Diaz<sup>3</sup>, Erika Hamilton<sup>4</sup>, Sami Diab<sup>5</sup>, Russell J. Schilder<sup>6</sup>, John W. Moroney<sup>7</sup>, Lainie P. Martin<sup>8</sup>, Denise Uyar<sup>9</sup>, David M. O'Malley<sup>10</sup>, Richard Penson<sup>11</sup>, Clifford DiLea<sup>12</sup>, Michael Palumbo<sup>13</sup>, Venita DeAlmeida<sup>13</sup>, Craig J. Berman<sup>13</sup>, Shannon Matheny<sup>13</sup>, Arturo Molina<sup>13</sup>

<sup>1</sup>Levine Cancer Institute, Atrium Health, Charlotte, NC; <sup>2</sup>Comprehensive Cancer Centers of Nevada, Las Vegas, NV; <sup>3</sup>Miami Cancer Institute at Baptist Health, Miami, FL; <sup>4</sup>Sarah Cannon Research Institute, Tennessee Oncology PLLC, Nashville, TN; <sup>5</sup>Rocky Mountain Cancer Center, Aurora, CO; <sup>6</sup>Sidney Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, PA; <sup>7</sup>University of Chicago, Chicago, IL; <sup>8</sup>University of Pennsylvania, Abramson Cancer Center, Philadelphia, PA; <sup>9</sup>Medical College of Wisconsin, Milwaukee, WI; <sup>10</sup>Ohio State University, Wexner Medical Center, Columbus, OH; <sup>11</sup>Massachusetts General Hospital, Boston, MA; <sup>12</sup>Aclairo Pharmaceutical Development Group, Vienna, VA; <sup>13</sup>Sutro Biopharma, Inc., South San Francisco, CA

## BACKGROUND

- Folate receptor alpha (FR $\alpha$ ) is a cell-surface glycoprotein that is overexpressed in OC and endometrial adenocarcinoma.
- Sutro's cell-free synthesis platform enables rapid production and high-throughput selection for optimization of ADC candidates.
- STRO-002 is a novel FolR $\alpha$ -targeting ADC containing an anti-FolR $\alpha$  human IgG1 antibody (SP8166) conjugated to a cleavable dibenzocyclooctyne (DBCO)-3-aminophenyl-hemiasterlin drug-linker, using site-directed conjugation technology to produce a well-defined ADC with the predominant species having a drug-antibody ratio (DAR) of 4.

## Generation of the FolR $\alpha$ -targeting lead antibody and a novel, specific and homogeneous ADC, STRO-002



## STRO-002-GM1 OBJECTIVES

- Primary Objectives (Endpoints)**
  - Dose expansion: Anti-tumor activity of STRO-002 (overall response rate)
- Secondary Objectives (Endpoints)**
  - Dose escalation: Characterize pharmacokinetics (PK) and immunogenicity (anti-drug antibodies (ADA))
  - Dose expansion: Toxicity, time to event endpoints (duration of response, progression-free survival), additional safety, PK
- Exploratory Objectives**
  - Dose escalation: Preliminary efficacy, PK correlation with efficacy, biomarkers
  - Dose expansion: Further PK correlation with efficacy, biomarkers

## DEMOGRAPHICS AND DISEASE CHARACTERISTICS

Characteristic	Total N = 39 (%)
Age, median (range), years	61 (48-79)
Tumor type	
EOC	30 (77)
Fallopian tube	7 (18)
Primary peritoneal	2 (5)
ECOG PS	
0	23 (59)
1	16 (41)
Median time from diagnosis (range)	3.9 years (0.6-17.1)
Median lines of prior therapy (range)	5 (2-10)
Platinum	39 (100)
≥ 3 prior platinum regimens	14 (36)
Taxanes	38 (97)
Bevacizumab	31 (79)
PARP inhibitors	23 (59)
Checkpoint inhibitors	8 (21)
Experimental therapy	13 (34)
Dose Level of STRO-002	
0.5 mg/kg, 1.0 mg/kg, 1.8 mg/kg	5 (13)
2.9 mg/kg	3 (8)
4.3 mg/kg	5 (13)
5.2 mg/kg	12 (31)
5.6 mg/kg	3 (8)
6.0 mg/kg	10 (26)
6.4 mg/kg	1 (3)

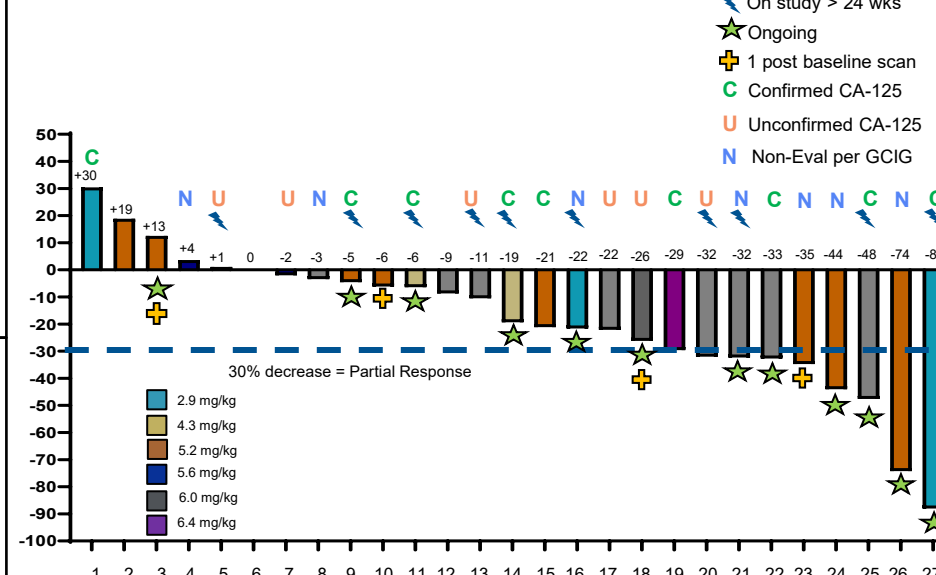
## TREATMENT EMERGENT AEs IN > 25% OF PATIENTS

Emerging STRO-002 safety profile includes mostly mild adverse events - 88% of all AEs reported are grade 1 or 2

Treatment Emergent Adverse Events (TEAE) -7/31/20					
TEAE >25%	Grade 1	Grade 2	Grade 3	Grade 4	N= 39(%)
Fatigue	8 (21)	14 (36)	4 (10)	0	26 (67)
Nausea	16 (41)	7 (18)	0	0	23 (59)
Neutropenia/ Neutrophil count decreased	0	3 (8)	7 (18)	10 (26)	20 (51)
Constipation	11 (28)	8 (21)	0	0	19 (49)
Arthralgia	6 (15)	6 (15)	5 (13)	0	17 (44)
Decreased Appetite	10 (26)	7 (18)	0	0	17 (44)
Abdominal pain	5 (13)	4 (10)	3 (8)	0	12 (31)
AST increased	10 (26)	1 (3)	1 (3)	0	12 (31)
Diarrhea	8 (21)	2 (5)	1 (3)	0	11 (29)
Peripheral neuropathy	2 (5)	7 (18)	1 (3)	0	10 (26)
Vomiting	6 (15)	4 (10)	0	0	10 (26)

- 2 DLTs have been reported: neuropathy (6.0 mg/kg); bone pain (6.4 mg/kg)
- Only 1 grade 3 febrile neutropenia reported
- Grade 5 event of death on Day 12 of Cycle 1 with no cause in 1 pt, not related per investigator
- Low rate of keratitis (n = 2) with long-term dosing (1 grade 3 in a patient inadvertently dosed at 7.0 mg/kg and another patient at 5.2 mg/kg); only 1 pt required therapeutic corticosteroid eyedrops

## ENCOURAGING RECIST RESPONSE AND STABLE DISEASE IN HEAVILY PRE-TREATED PATIENT DOSED AT ≥ 2.9 MG/KG – 8/3/20

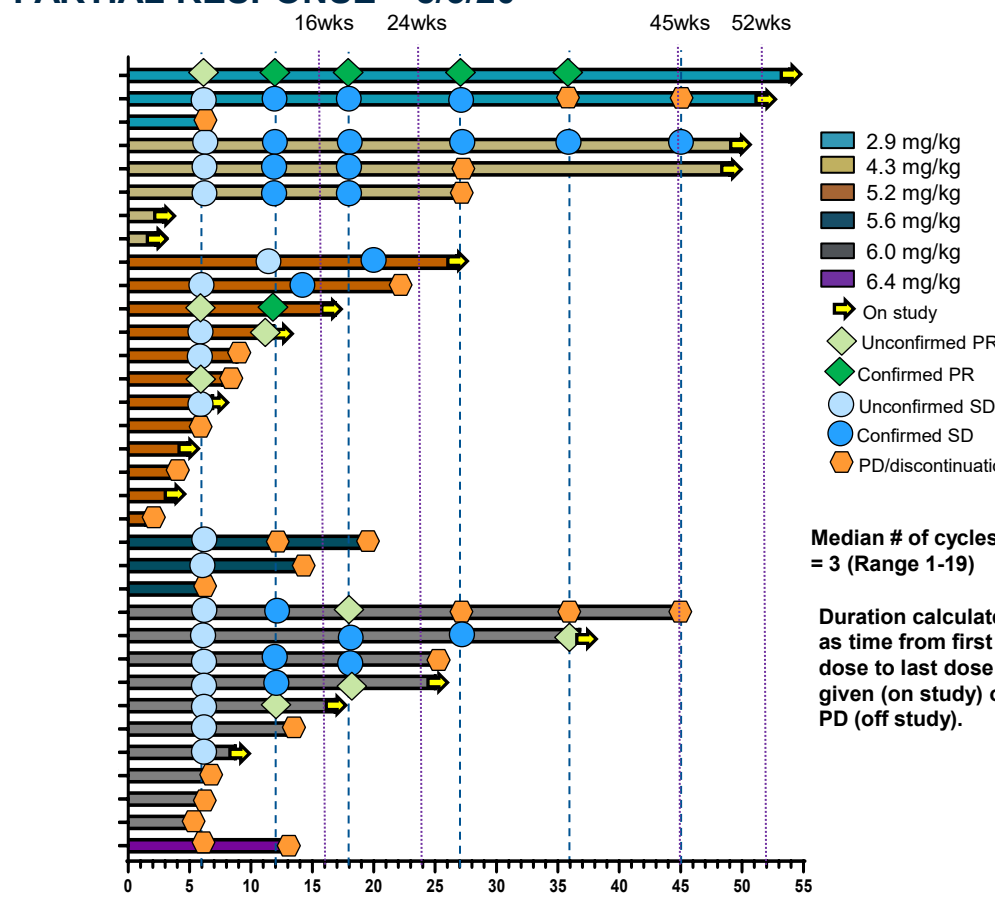


3 pts off study before post baseline scan  
4 pts ongoing, not yet at first post baseline scan

## POTENT EFFICACY PROFILE IS EMERGING AS STRO-002-GM1 STUDY CONTINUES TO MATURE

- Analyses based on 34 patients treated at ≥ 2.9 mg/kg**
- 30 evaluable for RECIST response
  - Continued increase in response rate and disease control rate**
    - 8 Partial Responses (PRs)
      - 2 confirmed, 6 unconfirmed
      - 7 PRs at > 12 weeks = 23% (7/30) ORR**
    - 13 stable disease (SD)
      - 7 confirmed at >12 weeks = 23% (7/30)
      - 6 unconfirmed, 2 remain on study
      - 47% (14/30) disease control rate (DCR)**
  - Duration on study encouraging**
    - 14 pts > 16 weeks, 10 pts > 24 weeks, 5 pts > 45 weeks, 2 pts > 52 weeks
  - Continued increase in CA-125 responses per GCIG criteria**
    - 42% (10/24) have confirmed CA-125 responses
    - 7 unconfirmed (2 ongoing and pending confirmation)
  - CA-125 responses continue to track well with disease control**

## 70% (21/30) EVALUABLE PATIENTS HAVE INITIAL POST-BASELINE SCANS THAT SHOW STABLE DISEASE OR PARTIAL RESPONSE – 8/3/20



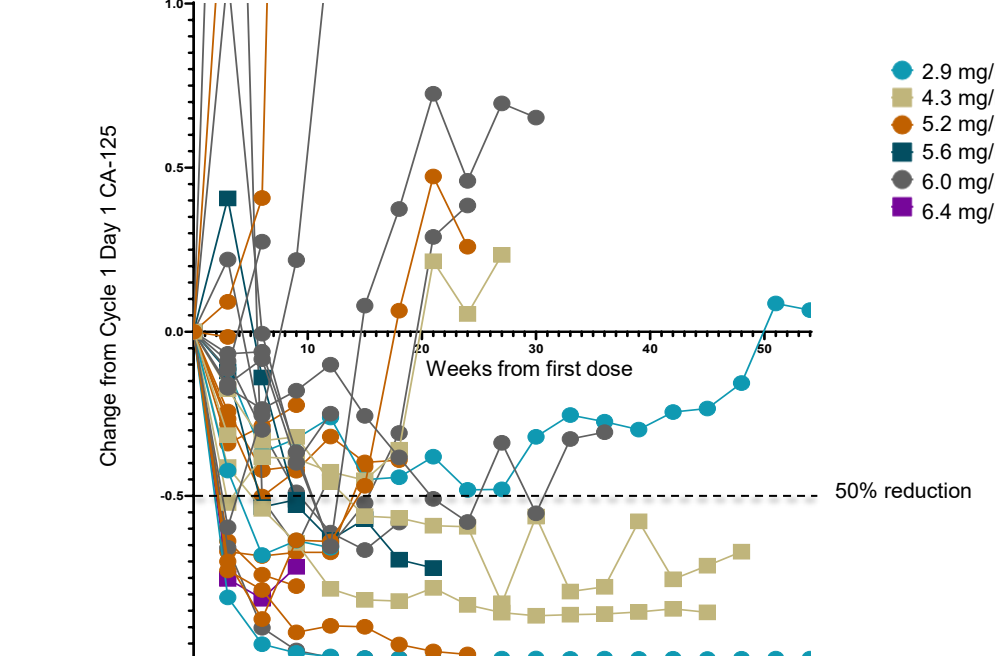
## RECIST Responses

- 34 pts, with N= 30 pts evaluable (4 not yet at 1<sup>st</sup> scan post baseline)
- 8 PRs: 2 confirmed, 6 unconfirmed (4 continue); **7 PRs at > 12 weeks**
- 13 SD: 7 confirmed (12 weeks), 6 unconfirmed (2 continue)
- Disease Control Rates (PR + con SD) = 14/30 (47%)

## Duration of Treatment

- 29% (10/34) of pts treated at ≥ 2.9 mg/kg remained on study > 24 weeks
- 41% on study > 16 weeks, 15% on study >45 weeks, 6% on study > 1 yr
- 47% patients remain on study treatment

## CA-125 RESPONSE IN PATIENTS TREATED AT ≥ 2.9 MG/KG, N=34 (24 EVALUABLE PER GCIG) – 8/3/20



## CA-125 Responses

- 16/24 (67%) evaluable patients have ≥ 50% reduction in CA-125
- 10/24 (42%) have confirmed CA-125 responses per GCIG
- 2/24 (8%) ongoing patients (confirmation pending/possible)
- 5/24 (21%) pts discontinued without confirmation
- 9 pts not evaluable (C1D1 CA-125 ≤ 2x upper limit ref. range)
- 1 ongoing pt with no post C1D1 assessment yet

## SUMMARY/CONCLUSION

- Promising Emerging Efficacy and Safety Profile in this Heavily Pretreated Unselected Patient Population**
- Evidence of anti-tumor activity observed starting at 2.9 mg/kg
  - Overall response rate of 23% and disease control rate 47%
  - Partial responses observed after initial period of stable disease
  - High rate of CA-125 reductions of ≥ 50% are associated with disease control
  - Improved efficacy outcomes expected as trial matures
- STRO-002 is generally well tolerated - 88% of all AEs are Grade 1 or 2.**
- Most common Grade 3-4 AE is neutropenia, which is reversible within 1 week
  - Neuropathy/arthralgia observed at higher doses
  - Prophylactic corticosteroid eye drops not required
- Further dose optimization will be explored during dose expansion in a less heavily pre-treated patient population**
- Anticipate RP2D will be in 4.3 – 5.2 mg/kg range

