

## 1. Title Page

<b>Study Title:</b>	<p>CANVAS</p> <p>CAN-004A: A Randomized Trial of Cvac (Autologous Dendritic Cells Pulsed with Recombinant Human Fusion Protein [Mucin 1-Glutathione S-Transferase] Coupled to Oxidized Polymannose) as Maintenance Treatment in Patients with Epithelial Ovarian Cancer (EOC) in Complete Remission Following First-Line Chemotherapy</p> <p>CAN-004AB: A Randomized Trial of Cvac (Autologous Dendritic Cells Pulsed with Recombinant Human Fusion Protein [Mucin 1-Glutathione S Transferase] Coupled to Oxidized Polymannose) as Maintenance Treatment in [A] Patients with Epithelial Ovarian Cancer (EOC) in Complete Remission Following First-Line Chemotherapy and [B] Patients with EOC in Second Remission</p> <p>CAN-004B: A Randomized Trial of Cvac (Autologous Dendritic Cells Pulsed with Recombinant Human Fusion Protein [Mucin 1-Glutathione S Transferase] Coupled to Oxidized Polymannose) as Maintenance Treatment in Patients with Epithelial Ovarian Cancer (EOC) in Second Remission</p>
<b>Test Drug:</b>	Cvac (autologous dendritic cells treated with mannosylated mucin 1 fusion protein)
<b>Indication:</b>	Epithelial Ovarian Cancer
<b>Sponsor:</b>	<p>Prima BioMed Ltd.</p> <p>Level 7, 151 Macquarie Street</p> <p>Sydney NSW</p> <p>Australia 2000</p>
<b>Study No.:</b>	CAN-004
<b>EudraCT No.:</b>	2011-000177-31
<b>Study Phase:</b>	2
<b>Study Initiation date: (first patient screened)</b>	Jan 20 2012 first informed consent signed and patient enrolled to permit screening
<b>Study Completion Date:</b>	Feb 27 2015 trial was terminated. Last patient, last visit discontinued in Part B was March 19 2015.
<b>Reason for Termination of Study:</b>	<b>Due to company restructuring and prioritization.</b>

## 2. Synopsis

<b>Title of Study: CANVAS</b>  CAN-004A: A Randomized Trial of Cvac (Autologous Dendritic Cells Pulsed with Recombinant Human Fusion Protein [Mucin 1-Glutathione S-Transferase] Coupled to Oxidized Polymannose) as Maintenance Treatment in Patients with Epithelial Ovarian Cancer (EOC) in Complete Remission Following First-Line Chemotherapy  CAN-004AB: A Randomized Trial of Cvac (Autologous Dendritic Cells Pulsed with Recombinant Human Fusion Protein [Mucin 1-Glutathione S Transferase] Coupled to Oxidized Polymannose) as Maintenance Treatment in [A] Patients with Epithelial Ovarian Cancer (EOC) in Complete Remission Following First-Line Chemotherapy and [B] Patients with EOC in Second Remission  CAN-004B: A Randomized Trial of Cvac (Autologous Dendritic Cells Pulsed with Recombinant Human Fusion Protein [Mucin 1-Glutathione S Transferase] Coupled to Oxidized Polymannose) as Maintenance Treatment in Patients with Epithelial Ovarian Cancer (EOC) in Second Remission	
<b>Study Centers:</b> CAN-004A: Australia 6 centers, Germany 4 centers and USA 16 centers  CAN-004 AB: Belarus 2 centers, Belgium 3 centers, Bulgaria 7 centers, Latvia 3 centers, Lithuania 3 centers, Poland 5 centers, Ukraine 10 centers  CAN-004B: Germany 0 centers	
Study Initiation Date: Jan 20, 2012 Study Completion Date: Feb 27, 2015 [study terminated]	Phase of Development: 2
<b>Objectives</b>	
<b>Part A</b>	<b>Part B</b>
<u>Primary Objectives</u>  To assess the efficacy, in terms of overall survival (OS), of Cvac compared with placebo for the maintenance treatment of patients with epithelial ovarian cancer (EOC) in complete remission (CR) following first-line chemotherapy.  <u>Secondary Objectives</u>  To assess the time to next treatment (TTNT) in patients after treatment with Cvac compared with placebo.  To assess the efficacy, in terms of progression-free survival (PFS), of Cvac compared with placebo for the maintenance treatment of patients with EOC in CR following first-line chemotherapy.  To assess the safety and tolerability of Cvac compared with placebo.	<u>Primary Objectives</u>  To assess the efficacy, in terms of overall survival (OS), of Cvac compared with observational standard of care following second remission in epithelial ovarian cancer (EOC).  <u>Secondary Objectives</u>  To assess the time to next treatment (TTNT) in patients after treatment with Cvac compared with observational standard of care.  To assess the efficacy, in terms of progression free survival (PFS), of Cvac compared with observational standard of care following second remission. To assess the safety and tolerability of Cvac compared with observational standard of care.

<p>To assess health-related quality of life (QoL) related to Cvac treatment compared with placebo.</p> <p><u>Exploratory Objectives</u></p> <p>To investigate the utility of biomarkers as predictors or markers of clinical outcomes of Cvac.</p> <p>To investigate histopathology of tumor samples for potential markers of predictive clinical efficacy of Cvac.</p> <p>To evaluate immunologic response to Cvac administration.</p> <p>To assess the effect of Cvac on changes in Eastern Cooperative Oncology Group (ECOG) performance status from baseline compared with placebo.</p>	<p>To assess health-related quality of life (QoL) related to Cvac treatment compared with observational standard of care.</p> <p><u>Exploratory Objectives</u></p> <p>To investigate the utility of biomarkers as predictors or markers of clinical outcomes of Cvac.</p> <p>To investigate histopathology of tumor samples for potential markers of predictive clinical efficacy of Cvac.</p> <p>To evaluate immunologic response to Cvac administration.</p> <p>To assess the effect of Cvac on changes in Eastern Cooperative Oncology Group (ECOG) performance status from baseline compared with observational standard of care.</p>
<p><b>Study Design</b> <b>PART A</b></p>	<p><b>Study Design</b> <b>PART B</b></p>
<p>CAN-004A was a multinational, multicenter, double-blind, randomized, placebo-controlled trial of Cvac (autologous dendritic cells [DCs] pulsed with recombinant human fusion protein [mucin 1-glutathione S-transferase] coupled to oxidized polymannose) as maintenance treatment in patients with EOC in CR following first-line chemotherapy.</p> <p>To be eligible for participation, patients had a diagnosis of stage III or IV EOC, had undergone an optimal debulking surgery (<math>\leq 1</math> cm of residual disease), with platinum and taxane chemotherapy, with or without bevacizumab, and had a tumor that overexpressed mucin 1, as well as met all other study inclusion and exclusion criteria at screening.</p> <p>Patients who met all study inclusion and exclusion criteria were randomized in a 1:1 double-blinded fashion to either the Cvac (active) group or the placebo (control) group. After randomization, patients underwent mononuclear cell (MNC) collection for production of the study agent and then began first-line chemotherapy. All randomized patients underwent MNC collection to maintain the blind. After completion of chemotherapy and confirmation of complete clinical and radiological remission (baseline), patients were entered into the treatment phase of the study.</p>	<p>CAN-004B was a multinational, multicenter, randomized trial of Cvac (autologous dendritic cells [DCs] pulsed with recombinant human fusion protein [mucin 1-glutathione S-transferase] coupled to oxidized polymannose) compared with observational standard of care as maintenance treatment in patients with EOC with no evidence of disease (NED) following second remission, defined as after response to second-line platinum-based therapy.</p> <p>To be eligible for participation, patients had first-line platinum-based chemotherapy with a first remission lasting for at least 6 months prior to relapse. Patients had a second remission defined as: 1) no definitive evidence of disease detected by computed tomography (CT) or magnetic resonance imaging (MRI) of the abdomen and pelvis; 2) cancer antigen 125 (CA-125) tumor marker within normal limits OR at least a 90% reduction from pretreatment levels at the start of second-line platinum based therapy; and 3) negative physical exam (i.e., no clinical signs) following standard platinumbased second-line chemotherapy (at least 3 cycles) with or without a second bulk-reducing surgery.</p> <p>Additionally, patients had a tumor that overexpressed mucin 1, as well as met all other study eligibility criteria.</p>

<p>Study agent dosing was every 4 weeks for the first 3 doses, then every 12 weeks for 3 additional doses, for a total of 6 doses over approximately 44 weeks. Each dose was divided and administered as 4 intradermal injections.</p> <p>After confirmation of CR at Baseline, patients were evaluated for progression. PFS was radiologically assessed at intervals of approximately 12 weeks at the site until progressive disease (PD), death, or until the end of the study if a patient had not progressed or died during the study. Radiological scans were evaluated at the site for determination of progression, and were kept for potential later evaluation by an independent radiologist. After PD, patients should continue to be contacted approximately every 24 weeks for OS assessment.</p>	<p>Secondary bulk-reducing surgery was not required as part of second-line treatment; however, chemotherapy</p> <p>In the second-line setting containing a standard regimen of platinum (at least 3 cycles) was required.</p> <p>Patients who met all study inclusion and exclusion criteria were randomized in a 1:1 fashion to either the Cvac (active) group or the observational standard of care (control) group. At the time of randomization, patients were stratified based on (a) whether they had a second bulk-reducing surgery; (b) if they received maintenance therapy for their EOC while in study (e.g., poly (ADP ribose) polymerase [PARP] inhibitor or anti-angiogenesis agent such as bevacizumab); and (c) time interval between the completion of first-line chemotherapy and the initiation of second-line treatment (<math>\leq 12</math> months, <math>&gt; 12</math> months).</p> <p>After randomization, only patients randomized to Cvac underwent mononuclear cell (MNC) collection for production of the study agent, Cvac. Upon confirmation of no evidence of disease at the baseline visit (defined as the visit within 2 weeks of the first dose), patients began the treatment phase of the study.</p> <p>Approximately 210 patients were recruited and randomized into the trial. Study agent dosing was every 4 weeks for the first 3 doses, then every 12 weeks for 3 additional doses, for a total of 6 doses over approximately 44 weeks. Each dose was divided and administered as 4 intradermal injections.</p> <p>Upon either completion or discontinuation of the treatment phase of the study, patients were followed for OS and PFS. OS was monitored every 24 weeks after confirmation of progressive disease (PD). PFS was radiologically assessed at intervals of approximately 12 weeks at the site until PD, death, or until the end of the study if a patient had not progressed or died during the study. Radiological scans were evaluated at the site for determination of progression, and were kept for potential later evaluation by an independent radiologist.</p> <p>Blood samples for exploratory analysis (peripheral blood mononuclear cell [PBMC] and serum) were collected as feasible prior to dosing, at Dose 3, and 4 weeks after the last dose of study agent, for immunological analyses. The methods for this</p>
---	---

	procedure and analyses are detailed in a separate protocol.
<p>Number of Patients (planned and analyzed):</p> <p>CAN-004A   Planned: 800 patients                   Analyzed: 76 randomized patients</p>	<p>Number of Patients (planned and analyzed):</p> <p>CAN-004B   Planned: 210 patients                   Analyzed: 15 randomized patients</p>
<p><b>Diagnosis and Main Criteria for Inclusion:</b> <b>PART A</b></p> <p>Patients were enrolled in and randomized to the study if they were females <math>\geq 18</math> years of age at screening with a confirmed diagnosis of Stage III or IV epithelial ovarian, primary peritoneal, or fallopian tube cancer and had undergone or planned to undergo optimal debulking surgery, defined as <math>\leq 1</math> cm of residual tumor. The patient was eligible for, and planned to undergo standard platinum and taxane first-line chemotherapy and had a mucin 1-positive tumor as determined by central immunohistopathology.</p>	<p><b>Diagnosis and Main Criteria for Inclusion:</b> <b>PART B</b></p> <p>Patients were enrolled in and randomized to the study only if they were females <math>\geq 18</math> years of age at screening; had a confirmed diagnosis of epithelial ovarian, fallopian tube, or peritoneal cancer; and underwent standard cytoreductive surgery; and first-line chemotherapy containing platinum before first relapse; and were in complete remission for at least 6 months prior to relapse; relapsed once and then underwent standard platinum-based second-line chemotherapy (at least 3 cycles was required) with or without a second bulk-reducing surgery. Second remission defined as no definitive evidence of disease (NED) on CT or MRI of the abdomen and pelvis; CA-125 <math>\leq</math> upper limit of normal (ULN) or 90% reduction in CA-125 since start of second-line chemotherapy; and negative physical exam (i.e., no clinical signs). Life expectancy <math>\geq 3</math> months in the opinion of the investigator and a mucin 1-positive tumor as determined by central immunohistopathology.</p>
<p><b>Duration of Treatment:</b> Injections were given at 4-week intervals for the first 3 doses, and then every 12 weeks for 3 additional doses, for a total of 6 doses over 44 weeks.</p>	
<p><b>Reference Therapy, Dose and Mode of Administration, Batch No.</b></p> <p><b>PART A:</b> The sterile placebo product consisted of the Cvac formulation buffer (5% HSA, 10% DMSO) with 0.9% simethicone provided in 1 mL vials that had been cryopreserved and stored at the manufacturing facility or qualified cryodepot.</p>	<p><b>Reference Therapy, Dose and Mode of Administration, Batch No.</b></p> <p><b>PART B:</b> Not applicable; the comparator arm was observational standard of care.</p>
<p><b>Criteria for Evaluation:</b> <b>Primary Endpoint PART A:</b></p> <p>The primary endpoint for this study was overall survival (OS).</p> <p>OS was measured as the number of days between baseline (Week 0) and the date of death from any cause. OS data was censored at the date of the data cutoff for the OS analysis for surviving patients, or at</p>	<p><b>Criteria for Evaluation:</b> <b>Primary Endpoint PART B:</b></p> <p>The primary endpoint for this study was overall survival (OS).</p> <p>OS was defined as the number of days elapsed between the randomization date and the date of death (regardless of cause). A secondary analysis of OS used the baseline visit as the reference starting date.</p>

the date of last contact for lost-to-follow-up patients, whichever occurred first.	
<p><b>Safety:</b></p> <p>Safety and tolerability were assessed by the following:</p> <p>Adverse events evaluated according to the National Cancer Institute (NCI) Common Terminology Criteria for Adverse Events (CTCAE) version 4</p> <p>Clinically relevant changes from baseline in vital signs</p> <p>Clinically relevant changes from baseline in 12-lead electrocardiogram (ECG)</p> <p>Clinically relevant changes from baseline in physical examinations</p> <p>Clinically relevant changes from baseline in safety laboratory assessments (hematology with differential count, biochemistry, and urinalysis)</p> <p>Clinically relevant autoantibody laboratory assessments.</p> <p>Quality of life was assessed by the following:</p> <p>European Organisation for Research and Treatment of Cancer–Quality of Life Questionnaire (EORTC QLQ-C30, version 3)</p> <p>OV28 Module to EORTC QLQ</p> <p>EuroQol Group EQ-5D-3L.</p>	
<b>Statistical Method PART A:</b>	<b>Statistical Method PART B:</b>
<p>The original protocol provided for up to 1,000 patients to undergo randomization so that approximately 800 patients would achieve CR upon the completion of first-line chemotherapy, and thus proceed to the treatment phase of the study. A total of 76 patients underwent randomization prior to the termination of enrollment in November 2013.</p> <p>Only 40 of these patients achieved CR following first-line chemotherapy and advanced to the treatment phase of the study to receive the study agent (Cvac or placebo); Efficacy and safety data was analyzed descriptively.</p>	<p>For patients with EOC in complete remission who underwent observational standard of care following either a second bulk-reducing surgery and/or standard platinum based second-line chemotherapy, it was expected that true median OS would be approximately 25 months when measured from the date of randomization. It was hypothesized that the administration of Cvac therapy in such patients would improve median OS from 25 to 35.7 months (i.e., 10.7 months of benefit). Under the exponential distribution, such an increase in median OS represented a 30% reduction in the OS failure hazard rate, or equivalently, a hazard ratio of 0.70.</p> <p>The final analysis of OS was performed using a stratified log-rank test, with one-sided type I error of 0.1, stratifying on the randomization stratification factors. The primary comparisons were an intention-to-treat analysis among all randomized patients regardless of eligibility status.</p> <p>A total accrual of 210 patients and total information of 142 OS failures (deaths) was estimated to give 80% power to detect a 30% reduction in the OS failure hazard rate. Assuming an accrual rate of 17.5 patients per month, approximately 12 months of accrual and an additional 43 months of follow-up were required to</p>

	reach the expected number of OS events. The final analysis of OS was expected to occur at about 55 months (12 months of accrual plus 43 months of follow up) after the activation of this protocol.
<b>Conclusion</b>	<p>The results of this study have shown that Cvac is safe and well tolerated. SAE were unrelated to treatment and the injection site or administration reactions were similar with placebo or Cvac. All safety labs and procedures showed no worsening with treatment and the majority of the patients showed no change or in some cases improvement in abnormal chemistries or CTCAE grades.</p> <p>Due to the early termination and low recruitment, efficacy analysis was not possible.</p> <p>Early termination was not due to futility but due to company restructuring and prioritization.</p>

### 3. Patient Disposition (ITT)

Enrollment Summary (ITT Population)			
Part A			
Disposition	Placebo (N=36)	CVAC (N=40)	Total (N=76)
Randomized	36	40	76
Country			
United States	16 ( 44%)	17 ( 43%)	33 ( 43%)
Ukraine	7 ( 19%)	10 ( 25%)	17 ( 22%)
Australia	4 ( 11%)	5 ( 13%)	9 ( 12%)
Germany	4 ( 11%)	3 ( 8%)	7 ( 9%)
Belarus	3 ( 8%)	3 ( 8%)	6 ( 8%)
Bulgaria	1 ( 3%)	2 ( 5%)	3 ( 4%)
Lithuania	1 ( 3%)	0 ( 0%)	1 ( 1%)
Received Study Agent (CVAC/Placebo)			
Yes	20 ( 56%)	20 ( 50%)	40 ( 53%)
No	16 ( 44%)	20 ( 50%)	36 ( 47%)
Primary Reason for Not Receiving Study Agent			
Withdrawal from study by subject	8 ( 22%)	6 ( 15%)	14 ( 18%)
Progressive disease	3 ( 8%)	9 ( 23%)	12 ( 16%)
Physician decision	2 ( 6%)	0 ( 0%)	2 ( 3%)
Protocol violation	1 ( 3%)	1 ( 3%)	2 ( 3%)
Adverse event	1 ( 3%)	0 ( 0%)	1 ( 1%)
Other	1 ( 3%)	4 ( 10%)	5 ( 7%)
Patient Disposition (Safety Population)			
Disposition	Placebo (N=20)	CVAC (N=20)	Total (N=40)
Study Agent (CVAC/Placebo) Administration Status			
Discontinued treatment	20 (100%)	20 (100%)	40 (100%)
Total Doses of Study Agent Administered			
2	1 ( 5%)	1 ( 5%)	2 ( 5%)
3	3 ( 15%)	3 ( 15%)	6 ( 15%)
4	0 ( 0%)	3 ( 15%)	3 ( 8%)
5	6 ( 30%)	2 ( 10%)	8 ( 20%)
6	10 ( 50%)	11 ( 55%)	21 ( 53%)
Duration of Study Agent Administration (days)			
N	20	20	40
Mean (SD)	231.1 (99.0)	221.8 (108.1)	226.4 (102.4)
Median	257.0	293.0	283.5
Range	28 to 318	30 to 317	28 to 318
Primary Reason for End of Study Visit			
Progressive disease	12 ( 60%)	8 ( 40%)	20 ( 50%)
Study terminated by sponsor	6 ( 30%)	10 ( 50%)	16 ( 40%)
Physician decision	0 ( 0%)	1 ( 5%)	1 ( 3%)
Other, patient started tamoxifen	1 ( 5%)	0 ( 0%)	1 ( 3%)
Not reported	1 ( 5%)	1 ( 5%)	2 ( 5%)
Patient Agreed to be Followed for Overall Survival			
Yes	13 ( 65%)	6 ( 30%)	19 ( 48%)
No	3 ( 15%)	10 ( 50%)	13 ( 33%)
Not reported/not applicable	4 ( 20%)	4 ( 20%)	8 ( 20%)
Vital Status at End of Study/Last Follow-up Contact			
Alive	17 ( 85%)	20 (100%)	37 ( 93%)
Dead	3 ( 15%)	0 ( 0%)	3 ( 8%)
Time on Study (days)			
N	20	20	40
Mean (SD)	404.7 (126.2)	407.1 (170.5)	405.9 (148.1)
Median	415.5	399.0	410.5
Range	155 to 717	62 to 782	62 to 782



# Part B

## Enrollment Summary (ITT Population)

Disposition	SOC (N=8)	CVAC (N=7)	Total (N=15)
Randomized	8	7	15
Country			
Bulgaria	5 ( 63%)	0 ( 0%)	5 ( 33%)
Latvia	2 ( 25%)	1 ( 14%)	3 ( 20%)
Lithuania	1 ( 13%)	2 ( 29%)	3 ( 20%)
Belarus	0 ( 0%)	2 ( 29%)	2 ( 13%)
Belgium	0 ( 0%)	1 ( 14%)	1 ( 7%)
Ukraine	0 ( 0%)	1 ( 14%)	1 ( 7%)
Received Study Treatment (CVAC/SOC)			
Yes	4 ( 50%)	3 ( 43%)	7 ( 47%)
No	4 ( 50%)	4 ( 57%)	8 ( 53%)
Primary Reason for Not Receiving Study Treatment			
Study terminated by sponsor	1 ( 13%)	2 ( 29%)	3 ( 20%)
Withdrawal from study by subject	1 ( 13%)	0 ( 0%)	1 ( 7%)
Protocol violation	0 ( 0%)	1 ( 14%)	1 ( 7%)
Other	2 ( 25%)	1 ( 14%)	3 ( 20%)
Patient Disposition (Safety Population)			
Disposition	SOC (N=4)	CVAC (N=3)	Total (N=7)
Study Treatment (CVAC/SOC) Status			
Discontinued	4 (100%)	3 (100%)	7 (100%)
Total Doses of CVAC Administered			
1	0 ( 0%)	2 ( 67%)	2 ( 29%)
2	0 ( 0%)	1 ( 33%)	1 ( 14%)
Duration of CVAC Administration (days)			
N	NA	3	3
Mean (SD)	NA	10.3 (16.2)	10.3 (16.2)
Median	NA	1.0	1.0
Range	NA	1 to 29	1 to 29
Primary Reason for End of Study Visit			
Study terminated by sponsor	4 (100%)	2 ( 67%)	6 ( 86%)
Progressive disease	0 ( 0%)	1 ( 33%)	1 ( 14%)
Patient Agreed to be Followed for Overall Survival			
Yes	0 ( 0%)	1 ( 33%)	1 ( 14%)
No	0 ( 0%)	1 ( 33%)	1 ( 14%)
Not reported/not applicable	4 (100%)	1 ( 33%)	5 ( 71%)
Vital Status at End of Study/Last Follow-up Contact			
Alive	4 (100%)	3 (100%)	7 (100%)
Time on Study (days)			
N	4	3	7
Mean (SD)	61.3 (40.0)	45.7 (14.0)	54.6 (30.6)
Median	55.0	50.0	50.0
Range	22 to 113	30 to 57	22 to 113

## 4. Demographics and Baseline Characteristics

Part A Demographics and Selected Baseline Characteristics (Safety Population)			
Characteristic	Placebo (N=20)	CVAC (N=20)	Total (N=40)
Country			
United States	6 ( 30%)	7 ( 35%)	13 ( 33%)
Ukraine	7 ( 35%)	6 ( 30%)	13 ( 33%)
Germany	2 ( 10%)	3 ( 15%)	5 ( 13%)
Australia	2 ( 10%)	2 ( 10%)	4 ( 10%)
Belarus	2 ( 10%)	2 ( 10%)	4 ( 10%)
Lithuania	1 ( 5%)	0 ( 0%)	1 ( 3%)
Sex			
Female	20 (100%)	20 (100%)	40 (100%)
Race			
White	19 ( 95%)	19 ( 95%)	38 ( 95%)
Asian	0 ( 0%)	1 ( 5%)	1 ( 3%)
Black or African American	1 ( 5%)	0 ( 0%)	1 ( 3%)
Ethnicity			
Not Hispanic or Latino	20 (100%)	19 ( 95%)	39 ( 98%)
Hispanic or Latino	0 ( 0%)	1 ( 5%)	1 ( 3%)
Age Group			
18 to 44 years	2 ( 10%)	3 ( 15%)	5 ( 13%)
45 to 64 years	15 ( 75%)	13 ( 65%)	28 ( 70%)
65 to 74 years	3 ( 15%)	4 ( 20%)	7 ( 18%)
Age (years)			
N	20	20	40
Mean (SD)	55.5 (10.6)	53.4 (10.6)	54.4 (10.5)
Median	57.0	52.5	54.5
Range	27 to 71	34 to 74	27 to 74
Height (cm)			
N	20	20	40
Mean (SD)	163 (4.67)	162 (7.42)	163 (6.19)
Median	163	161	163
Range	156 to 173	150 to 175	150 to 175
Weight (kg)			
N	20	20	40
Mean (SD)	71.9 (8.54)	75.2 (18.20)	73.5 (14.13)
Median	72.5	69.5	71.2
Range	55 to 93	48 to 122	48 to 122
Body Mass Index			
N	20	20	40
Mean (SD)	26.9 (3.09)	28.7 (6.05)	27.8 (4.83)
Median	26.2	27.5	27.0
Range	21.9 to 32.2	19.4 to 42.4	19.4 to 42.4
BMI Classification			
Normal weight	7 ( 35%)	6 ( 30%)	13 ( 33%)
Overweight	7 ( 35%)	6 ( 30%)	13 ( 33%)
Obese (class 1)	6 ( 30%)	5 ( 25%)	11 ( 28%)
Obese (class 2)	0 ( 0%)	2 ( 10%)	2 ( 5%)
Morbidly obese	0 ( 0%)	1 ( 5%)	1 ( 3%)
ECOG Performance Status			
0	16 ( 80%)	17 ( 85%)	33 ( 83%)
1	4 ( 20%)	3 ( 15%)	7 ( 18%)
Stage at Initial Diagnosis			
III	16 ( 80%)	18 ( 90%)	34 ( 85%)
IV	4 ( 20%)	2 ( 10%)	6 ( 15%)
Time From Initial Diagnosis to Informed Consent (days)			
N	20	20	40
Mean (SD)	41.7 (47.50)	26.2 (34.23)	34.0 (41.61)
Median	15.5	12.5	14.0
Range	6 to 173	8 to 108	6 to 173
CA-125 (U/mL)			
N	20	20	40
Mean (SD)	13.6 (6.45)	14.0 (6.58)	13.8 (6.43)
Median	11.8	11.1	11.3
Range	6.2 to 28.5	5.8 to 29.9	5.8 to 29.9

# Part B

## Demographics and Selected Baseline Characteristics (Safety Population)

Characteristic	SOC (N=4)	CVAC (N=3)	Total (N=7)
Country			
Bulgaria	2 ( 50%)	0 ( 0%)	2 ( 29%)
Lithuania	1 ( 25%)	1 ( 33%)	2 ( 29%)
Belgium	0 ( 0%)	1 ( 33%)	1 ( 14%)
Belarus	0 ( 0%)	1 ( 33%)	1 ( 14%)
Latvia	1 ( 25%)	0 ( 0%)	1 ( 14%)
Sex			
Female	4 (100%)	3 (100%)	7 (100%)
Race			
White	4 (100%)	3 (100%)	7 (100%)
Ethnicity			
Not Hispanic or Latino	4 (100%)	3 (100%)	7 (100%)
Age Group			
18 to 44 years	0 ( 0%)	1 ( 33%)	1 ( 14%)
45 to 64 years	2 ( 50%)	1 ( 33%)	3 ( 43%)
65 to 74 years	1 ( 25%)	1 ( 33%)	2 ( 29%)
75 years and older	1 ( 25%)	0 ( 0%)	1 ( 14%)
Age (years)			
N	4	3	7
Mean (SD)	65.0 (11.9)	56.3 (18.2)	61.3 (14.2)
Median	65.5	59.0	59.0
Range	52 to 77	37 to 73	37 to 77
Height (cm)			
N	4	3	7
Mean (SD)	163 (1.50)	164 (10.97)	164 (6.45)
Median	163	168	164
Range	162 to 165	152 to 173	152 to 173
Weight (kg)			
N	4	3	7
Mean (SD)	61.8 (6.65)	73.2 (16.66)	66.6 (12.32)
Median	61.0	70.5	64.0
Range	55 to 70	58 to 91	55 to 91
Body Mass Index			
N	4	3	7
Mean (SD)	23.2 (2.64)	27.2 (5.72)	24.9 (4.35)
Median	22.8	30.4	23.5
Range	20.4 to 26.7	20.5 to 30.5	20.4 to 30.5
BMI Classification			
Normal weight	3 ( 75%)	1 ( 33%)	4 ( 57%)
Overweight	1 ( 25%)	0 ( 0%)	1 ( 14%)
Obese (class 1)	0 ( 0%)	2 ( 67%)	2 ( 29%)
ECOG Performance Status			
0	3 ( 75%)	2 ( 67%)	5 ( 71%)
1	1 ( 25%)	1 ( 33%)	2 ( 29%)
Stage at Initial Diagnosis			
III	4 (100%)	3 (100%)	7 (100%)
CA-125 (U/mL)			
N	3	2	5
Mean (SD)	17.4 (13.91)	12.7 (2.97)	15.5 (10.28)
Median	9.4	12.7	10.6
Range	9.4 to 33.5	10.6 to 14.8	9.4 to 33.5

## 5. Efficacy Evaluation

Not applicable as the trial was terminated early with incomplete enrollment of <10%.

## 6. Adverse Events

All analysis presented are in the safety population for the trial. The safety population included all patients in the ITT population who received at least one dose of study agent.

**Table 6.1:** Overall Adverse Event Information (PART A - Safety Population)

Overall Adverse Event Information (Safety Population)			
Status	Placebo (N=20)	Cvac (N=20)	Total (N=40)
Patients who had a TEAE	13 (65%)	17 (85%)	30 (75%)
Patients who had a TEAE related to study agent	8 (40%)	11 (55%)	19 (48%)
Patients who had a TEAE of special interest-injection site reaction	6 (30%)	8 (40%)	14 (35%)
Patients who had a Grade 3 or Grade 4 TEAE	1 (5%)	1 (5%)	2 (5%)
Patients who had a Grade 3 or 4 related to study agent	0 (0%)	0 (0%)	0 (0%)
Patients who had a TEAE with action study agent withdrawn	0 (0%)	0 (0%)	0 (0%)
Patients who had a TEAE with action study agent dosing modified	0 (0%)	1 (5%)	1 (3%)
Patients who had a serious TEAE	2 (10%)	2 (10%)	4 (10%)
Patients who had a TEAE with outcome of fatal	0 (0%)	0 (0%)	0 (0%)

TEAE represents treatment-emergent adverse event. TEAEs are defined as adverse events that start on or after the first dose of study agent. Percentages are based on the number of patients in the safety population. Severity grade assignment based on the CTCAE: Grade 3 (severe), Grade 4 (life-threatening). Related events are those judged by the Investigator as possibly related or related to the study agent. Dosing modification includes does reduced or drug interrupted.

**Table 6.2:** Overall Adverse Event Information (PART B - Safety Population)

Overall Adverse Event Information (Safety Population)			
Status	SOC (N=4)	Cvac (N=3)	Total (N=7)
Patients who had a TEAE	0 (0%)	2 (67%)	2 (29%)
Patients who had a TEAE related to Cvac	0 (0%)	1 (33%)	1 (14%)
Patients who had a TEAE of special interest-injection site reaction	0 (0%)	1 (33%)	1 (14%)
Patients who had a Grade 3 or Grade 4 TEAE	0 (0%)	0 (0%)	0 (0%)
Patients who had a Grade 3 or 4 TEAE related to Cvac	0 (0%)	0 (0%)	0 (0%)
Patients who had a TEAE with action Cvac withdrawn	0 (0%)	1 (33%)	1 (14%)
Patients who had a TEAE with action Cvac dosing modified	0 (0%)	0 (0%)	0 (0%)
Patients who had a serious TEAE	0 (0%)	0 (0%)	0 (0%)
Patients who had a TEAE with outcome of fatal	0 (0%)	0 (0%)	0 (0%)

TEAE represents treatment-emergent adverse event. TEAEs are defined as adverse events that start on or after the first dose of Cvac or Visit 1 if assigned to the SOC arm. Percentages are based on the number of patients in the safety population. Severity grade assignment based on the CTCAE: Grade 3 (severe), Grade 4 (life-threatening). Related events are those judged by the Investigator as possibly related or related to the study agent. Dosing modification includes does reduced or drug interrupted.

**Table 6.3:** Treatment-Emergent Adverse Events Reported in all Patients (Part A)

<b>Treatment-Emergent Adverse Events by System Organ Class and Preferred Term (Safety Population)</b>			
<b>System Organ Class Preferred Term</b>	<b>Placebo (N=20)</b>	<b>Cvac (N=20)</b>	<b>Total (N=40)</b>
Blood and lymphatic system disorders	2 (10%)	0 (0%)	2 (5%)
Anaemia	1 (5%)	0 (0%)	1 (3%)
Lymphopenia	1 (5%)	0 (0%)	1 (3%)
Cardiac disorders	1 (5%)	0 (0%)	1 (3%)
Atrioventricular block second degree	1 (5%)	0 (0%)	1 (3%)
Ear and labyrinth disorders	1 (5%)	0 (0%)	1 (3%)
Tinnitus	1 (5%)	0 (0%)	1 (3%)
Eye disorders	0 (0%)	1 (5%)	1 (3%)
Visual impairment	0 (0%)	1 (5%)	1 (3%)
Gastrointestinal disorders	9 (45%)	8 (40%)	17 (43%)
Nausea	4 (20%)	1 (5%)	5 (13%)
Constipation	2 (10%)	2 (10%)	4 (10%)
Diarrhea	3 (15%)	1 (5%)	4 (10%)
Abdominal hernia	1 (5%)	2 (10%)	3 (8%)
Abdominal pain	2 (10%)	1 (5%)	3 (8%)
Abdominal distension	1 (5%)	1 (5%)	2 (5%)
Vomiting	2 (10%)	0 (0%)	2 (5%)
Abdominal adhesions	0 (0%)	1 (5%)	1 (3%)
Abdominal discomfort	1 (5%)	0 (0%)	1 (3%)
Abdominal pain lower	0 (0%)	1 (5%)	1 (3%)
Abdominal pain upper	0 (0%)	1 (5%)	1 (3%)
Flatulence	0 (0%)	1 (5%)	1 (3%)
Gastritis erosive	1 (5%)	0 (0%)	1 (3%)
Intestinal obstruction	1 (5%)	0 (0%)	1 (3%)
Lip blister	1 (5%)	0 (0%)	1 (3%)
Small intestinal perforation	0 (0%)	1 (5%)	1 (3%)
General disorders and administration site conditions	9 (45%)	9 (45%)	18 (45%)
Injection site erythema	4 (20%)	5 (25%)	9 (23%)
Injection site pain	2 (10%)	3 (15%)	5 (13%)
Injection site nodule	2 (10%)	2 (10%)	4 (10%)
Injection site reaction	2 (10%)	2 (10%)	4 (10%)
Chills	1 (5%)	2 (10%)	3 (8%)
Asthenia	1 (5%)	1 (5%)	2 (5%)
Chest pain	1 (5%)	1 (5%)	2 (5%)
Fatigue	2 (10%)	0 (0%)	2 (5%)
Hernia	2 (10%)	0 (0%)	2 (5%)
Influenza like illness	0 (0%)	2 (10%)	2 (5%)
Fat necrosis	0 (0%)	1 (5%)	1 (3%)
Feeling hot	1 (5%)	0 (0%)	1 (3%)
Infusion site erythema	1 (5%)	0 (0%)	1 (3%)
Infusion site pain	1 (5%)	0 (0%)	1 (3%)
Injection site discomfort	0 (0%)	1 (5%)	1 (3%)
Injection site hematoma	0 (0%)	1 (5%)	1 (3%)
Local swelling	1 (5%)	0 (0%)	1 (3%)
Nodule	1 (5%)	0 (0%)	1 (3%)
Edema	1 (5%)	0 (0%)	1 (3%)
Pain	0 (0%)	1 (5%)	1 (3%)
Hepatobiliary disorders	0 (0%)	1 (5%)	1 (3%)
Cholecystitis chronic	0 (0%)	1 (5%)	1 (3%)
Infections and Infestations	3 (15%)	3 (15%)	6 (15%)
Tonsillitis	0 (0%)	2 (10%)	2 (5%)
Gingival infection	0 (0%)	1 (5%)	1 (3%)
Herpes complex	0 (0%)	1 (5%)	1 (3%)
Hordeolum	1 (5%)	0 (0%)	1 (3%)
Rhinitis	0 (0%)	1 (5%)	1 (3%)
Sinusitis	1 (5%)	0 (0%)	1 (3%)
Upper respiratory tract infection	1 (5%)	0 (0%)	1 (3%)



Injury, Poisoning and procedural complications	3 (15%)	3 (15%)	6 (15%)
Procedural nausea	3 (15%)	0 (0%)	3 (8%)
Contusion	0 (0%)	2 (10%)	2 (5%)
Joint injury	1 (5%)	0 (0%)	1 (3%)
Procedural dizziness	0 (0%)	1 (5%)	1 (3%)
Procedural pain	1 (5%)	0 (0%)	1 (3%)
Investigations	1 (5%)	4 (20%)	5 (13%)
Gamma-glutamyltransferase increased	0 (0%)	2 (10%)	2 (5%)
Weight increased	0 (0%)	2 (10%)	2 (5%)
White blood cell count decreased	1 (5%)	1 (5%)	2 (5%)
Blood creatinine increased	0 (0%)	1 (5%)	1 (3%)
Neutrophil count decreased	1 (5%)	0 (0%)	1 (3%)
Metabolism and nutrition disorders	0 (0%)	1 (5%)	1 (3%)
Hyperkalemia	0 (0%)	1 (5%)	1 (3%)
Musculoskeletal and connective tissue disorders	7 (35%)	7 (35%)	14 (35%)
Arthralgia	2 (10%)	4 (20%)	6 (15%)
Back pain	2 (10%)	2 (10%)	4 (10%)
Pain in extremity	2 (10%)	2 (10%)	4 (10%)
Myalgia	2 (10%)	1 (5%)	3 (8%)
Muscle spasms	0 (0%)	2 (10%)	2 (5%)
Bursitis	0 (0%)	1 (5%)	1 (3%)
Osteoarthritis	0 (0%)	1 (5%)	1 (3%)
Osteoporosis	1 (5%)	0 (0%)	1 (3%)
Tendonitis	1 (5%)	0 (0%)	1 (3%)
Neoplasms benign, malignant and unspecified	1 (5%)	0 (0%)	1 (3%)
Benign breast neoplasm	1 (5%)	0 (0%)	1 (3%)
Nervous system disorders	3 (15%)	4 (20%)	7 (18%)
Headache	1 (5%)	2 (10%)	3 (8%)
Dizziness	1 (5%)	1 (5%)	2 (5%)
Polyneuropathy	1 (5%)	1 (5%)	2 (5%)
Dysgeusia	0 (0%)	1 (5%)	1 (3%)
Neuropathy peripheral	1 (5%)	0 (0%)	1 (3%)
Syncope	1 (5%)	0 (0%)	1 (3%)
Toxic neuropathy	1 (5%)	0 (0%)	1 (3%)
Psychiatric disorders	0 (0%)	2 (10%)	2 (5%)
Depression	0 (0%)	2 (10%)	2 (5%)
Renal and urinary disorders	1 (5%)	3 (15%)	4 (10%)
Hydronephrosis	0 (0%)	1 (5%)	1 (3%)
Micturition urgency	0 (0%)	1 (5%)	1 (3%)
Proteinuria	0 (0%)	1 (5%)	1 (3%)
Stress urinary incontinence	1 (5%)	0 (0%)	1 (3%)
Ureteral disorder	0 (0%)	1 (5%)	1 (3%)
Urinary incontinence	0 (0%)	1 (5%)	1 (3%)
Reproductive system and breast disorders	0 (0%)	1 (5%)	1 (3%)
Atrophic vulvovaginitis	0 (0%)	1 (5%)	1 (3%)
Respiratory, thoracic and mediastinal disorders	3 (15%)	2 (10%)	5 (13%)
Cough	2 (10%)	0 (0%)	2 (5%)
Dyspnea	1 (5%)	1 (5%)	2 (5%)
Oropharyngeal pain	0 (0%)	1 (5%)	1 (3%)
Sinus congestion	1 (5%)	0 (0%)	1 (3%)
Upper-airway cough syndrome	1 (5%)	0 (0%)	1 (3%)
Skin and subcutaneous tissue disorders	3 (15%)	5 (25%)	8 (20%)
Erythema	2 (10%)	1 (5%)	3 (8%)
Alopecia	0 (0%)	1 (5%)	1 (3%)
Dry skin	0 (0%)	1 (5%)	1 (3%)
Ephelides	0 (0%)	1 (5%)	1 (3%)
Photodermatitis	0 (0%)	1 (5%)	1 (3%)
Pruritus generalized	0 (0%)	1 (5%)	1 (3%)
Toxic skin eruption	1 (5%)	0 (0%)	1 (3%)
Vascular disorders	0 (0%)	4 (20%)	4 (10%)
Lymphedema	0 (0%)	2 (10%)	2 (5%)
Hematoma	0 (0%)	1 (5%)	1 (3%)
Hot flush	0 (0%)	1 (5%)	1 (3%)
Hypertension	0 (0%)	1 (5%)	1 (3%)

TEAE represents treatment-emergent adverse event.

TEAEs are defined as adverse events that start on or after the first dose of study agent.

Percentages are based on the number of patients in the safety population.

Patients are counted once within each system organ class and preferred term.

Investigator reported adverse event terms were coded using MedDRA dictionary.

**Table 6.4:** Treatment-Emergent Adverse Events Reported in all Patients (Part B)

<b>Treatment-Emergent Adverse Events by System Organ Class and Preferred Term (Safety Population)</b>			
<b>System Organ Class Preferred Term</b>	<b>SOC N=4</b>	<b>Cvac N=3</b>	<b>Total N=7</b>
Cardiac disorders	0 (0%)	1 (33%)	1 (14%)
Palpitations	0 (0%)	1 (33%)	1 (14%)
Endocrine disorders	0 (0%)	1 (33%)	1 (14%)
Autoimmune thyroiditis	0 (0%)	1 (33%)	1 (14%)
General disorders and administration site conditions	0 (0%)	1 (33%)	1 (14%)
Influenza like illness	0 (0%)	1 (33%)	1 (14%)
Injection site reaction	0 (0%)	1 (33%)	1 (14%)
Musculoskeletal and connective tissue disorders	0 (0%)	1 (33%)	1 (14%)
Myalgia	0 (0%)	1 (33%)	1 (14%)
Respiratory, thoracic and mediastinal disorders	0 (0%)	1 (33%)	1 (14%)
Pleural effusion	0 (0%)	1 (33%)	1 (14%)

TEAE represents treatment-emergent adverse event.

TEAEs are defined as adverse events that start on or after the first dose of Cvac or Visit 1 if assigned to the SOC arm.

Percentages are based on the number of patients in the safety population.

Patients are counted once within each system organ class and preferred term.

Investigator reported adverse event terms were coded using MedDRA dictionary.

## 7. Deaths, Other Serious Adverse Events, and Other Significant Adverse events

**Table 7.1:** Deaths report in Part A

<b>Deaths (Safety Population)</b>			
<b>Age/sex/race<sup>1</sup></b>	<b>Treatment group</b>	<b>Date of Death (day)<sup>2</sup></b>	<b>Number of Days between Death and Last Study Treatment</b>
48/F/WH	Placebo	2014-03-14 (155)	128
53/F/WH	Placebo	2015-03-10 (420)	364
50/F/WH	Placebo	2015-03-10 (420)	190

<sup>1</sup>: WH=White

<sup>2</sup>: Study Day is the calculation relative to the date of the first dose of study agent (Cvac/Placebo).

No deaths were reported for Part B.

**Table 7.2** Serious Treatment Emergent Adverse events (Part A)

<b>Serious Treatment-Emergent Adverse Events (safety Population)</b>			
Preferred Term	Placebo N=20	Cvac N= 20	Total N=40
Arthralgia	0 (0%)	1 (5%)	1 (3%)
Constipation	1 (5%)	0 (0%)	1 (3%)
Fat Necrosis	0 (0%)	1 (5%)	1 (3%)
Hernia	1 (5%)	0 (0%)	1 (3%)
Small intestinal perforation	0 (0%)	1 (5%)	1 (3%)

TEAE represents treatment-emergent adverse event.

TEAEs are defined as adverse events that start on or after the first dose of Cvac or Visit 1 if assigned to the SOC arm.

Percentages are based on the number of patients in the safety population.

Patients are counted once within each preferred term.

Investigator reported adverse event terms were coded using MedDRA dictionary.

No serious TEAEs were reported for part B.