Advaxis, Inc. – Company Overview

Chris Duke

Chief Operating Officer

Cervix Cancer Education Symposium, January 2017, Mexico

Advaxis is Developing Targeted Immunotherapies for a Broad Range of Cancers

GYNECOLOGIC CANCER INTERGROUP
An Organization of International Cooperative Groups for Clinical Trials in Gynecologic Cancers

Bacterial Vector System

- Bioengineered *Listeria monocytogenes* (*Lm*) generates T-cell response capable of targeting multiple tumors
- Stimulates innate and adaptive immune response to attack cancer cells
- Single-agent activity demonstrated; potential for combination synergies
- Manageable safety profile
- Versatile platform
- Highly proprietary technology, straight-forward manufacturing

Broad Pipeline

- Lead candidate axalimogene filolisbac (AXAL) in Phase 3 in cervical cancer; Phase 2 in anal and head & neck cancers
- 2 other clinical assets targeting prostate cancer and HER-2 positive solid tumors
- ADXS-NEO IND in early 2017 in development collaboration with Amgen
- ADXS-HOT IND planned for late 2017

Addressing High Unmet Need in Cervical Cancer

- 12-month survival rates in metastatic cervical cancer exceed historical GOG studies
- Phase 3 AIM2CERV trial under way in patients with high-risk, locally advanced cervical cancer
- Phase 3 in metastatic cervical cancer to begin in 2017
- EMA filing in metastatic cervical cancer in 2017
- Fast-Track Designation, Orphan Drug Designation

Experienced Management Team

Daniel O'Connor
Chief Executive Officer
ImClone Systems Incorporated
PharmaNet
inVentiv Health

Robert Petit
Chief Scientific Officer
MGI PHARMA
Bristol-Myers Squibb Company
PHARMACIA

Sara Bonstein
Chief Financial Officer
ImClone Systems Incorporated
Lilly
Johnson & Johnson

Chris Duke
Chief Operating Officer
NPS Pharma
Amicus Therapeutics

Mayo Pujols
Sr. Vice President,
Technical Operations
MERCK

Thomas Hare
Sr. Vice President,
Product Development
Bristol-Myers Squibb Company

Robert Ashworth
Sr. Vice President,
Regulatory, Quality and Compliance
NPS PHARMACEUTICALS

Ranya Dajani
Vice President,
Corporate Development
Bristol-Myers Squibb Company

Lm Technology™ Overview: Harnessing Unique Life Cycle of *Lm* in APCs

Lm-LLO agent taken up only by phagocytic dendritic cells/APCs

▼

Lm-LLO stimulates a strong innate multipathway immune response (eg. STING) in APC

▼

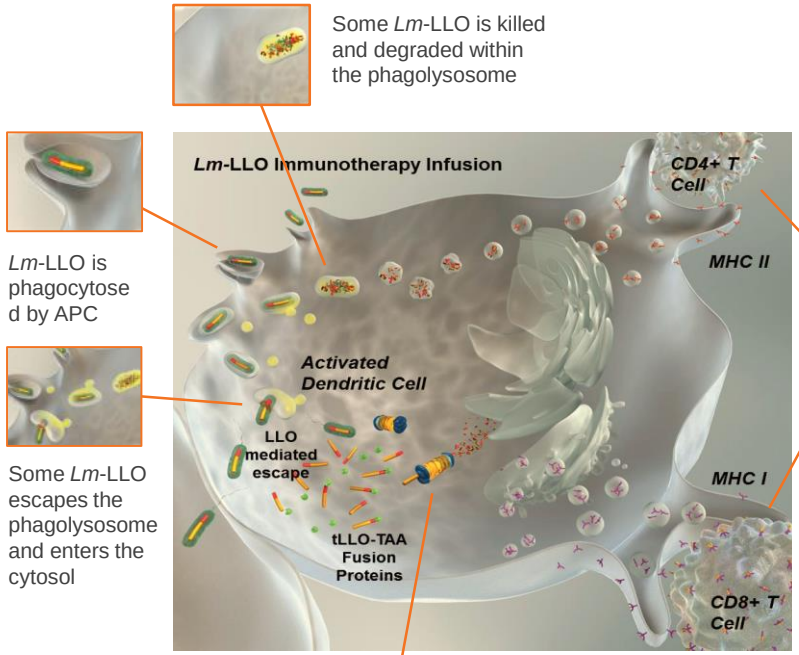
Lm-LLO expresses LLO-TAA fusion protein, which is processed by stimulated APC and activates TAA-specific T-cells

▼

Robust T-cell response generated toward TAA, allowing tumor-specific immune response

▼

Immune activation can overcome checkpoint inhibition and negative regulators of cellular immunity



APC, antigen-presenting cell; *Lm*, *Listeria monocytogenes*; MHC, major histocompatibility complex; TAA, tumor-associated antigen; tLLO, truncated listeriolysin O.

The Bacterial Vector System Provides a Unique Multi-pronged Approach to Immunotherapy

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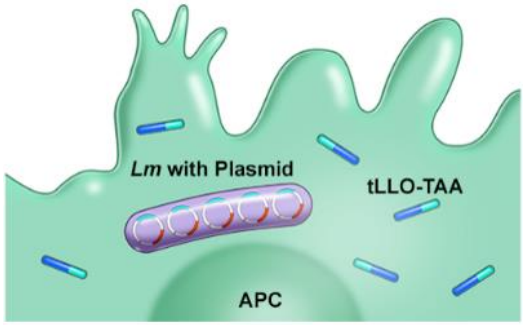
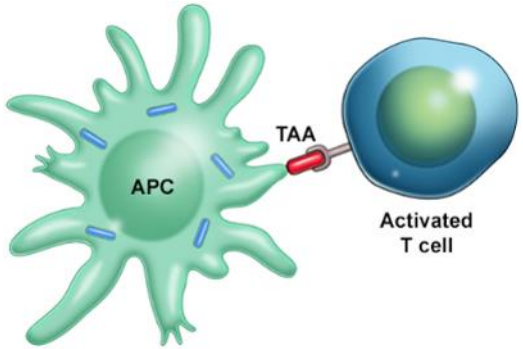
Trigger & Target
Response/Recognize Cancer



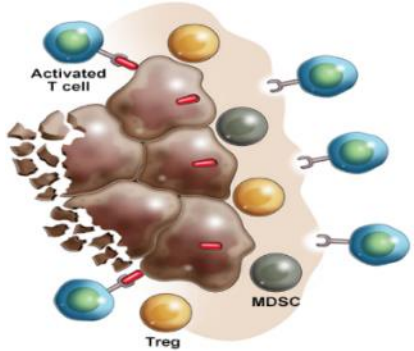
- Bacterial vector (attenuated *listeria monocytogenes* or *Lm*) system triggers robust innate and adaptive immune response
- Embedded bioengineered plasmids generate fusion protein truncated listeriolysin O tumor associated antigen (tLLO-TAA),
- Cancer is recognized

Activate Against Target
T-cell Direct Tumor Effect



- tLLO-TAA activates cytotoxic T cells
- T cells targets tumor antigen of choice

Disarm & Attack
TME Defense Mechanisms



- Reduces the tumor's protective shield
- tLLO-TAA inhibits Tregs and myeloid-derived suppressor cell (MDSC) in tumor microenvironment
- Enables destruction

Broad Clinical Pipeline Targeting Multiple Tumor Types

Product Candidate	Target Population	IND	Ph 1	Ph 2	Ph 3
AXAL	High risk locally advanced cervical cancer				
	Metastatic cervical cancer		1H 2017		
	Metastatic cervical and head & neck cancer *Combination with durvalumab* (AstraZeneca)				
	Metastatic anal cancer				
ADXS-PSA	Metastatic prostate cancer *Combination with KEYTRUDA® (pembrolizumab)* (MERCK)				
ADXS-HER2	HER2-positive metastatic solid tumors				
	Pediatric osteosarcoma		2017		
ADXS-NEO	Multiple cancers by targeting neoantigens (AMGEN)	IND 2017			
ADXS-HOT	Multiple cancers by targeting hotspot mutations	IND 2017			

Moving Away from “One Size Fits All” Cancer Treatment

ADVAXIS IMMUNOTHERAPIES™

AMGEN

Efficient Process for Highly Personalized Immunotherapy for Multiple Cancers

- Tumor biopsy, parallel sequencing identify unique neoantigen specific to an individual patient’s tumor
- Sequencing data used to bioengineer ADXS-NEO construct
- Tumor biopsy to treatment infusion is approximately 8 weeks

Global Collaboration

- $40M upfront
- $25M stock purchase
- $475M in achievement-based milestones
- Amgen fully funding all development and commercial activities
- Tiered royalties on net sales

IND to be filed in early 2017

AXAL: Lead Candidate Targeting High Unmet Medical Need in HPV-associated Cancers

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Targets HPV-associated Cancers

Clinical Studies:

Cervical Cancer
- Adjuvant Phase 3 - Underway
- Metastatic Phase 3 – Planned

Anal Cancer
- Phase 2 - Underway

Head & Neck Cancers
- Phase 2 Combo - Underway

Promising Clinical Data

Cervical Cancer:

- 12-month OS rates for AXAL exceeded historical GOG studies in metastatic setting
- Combination therapy w/ durvalumab in Recurrent/Metastatic
- Granted FDA SPA, Fast-Track and Orphan status
- Granted ATMP by EMA CAT; EMA filing planned 1H2017

Manageable Safety Profile

Clinical Profile Includes:

- Consistent safety profile in preliminary findings
- GOG-0265 Clinical Study demonstrates AXAL well tolerated, manageable adverse events

HPV - Human papillomavirus; AXAL - Axalimogene Filolisbac; FDA - Food and Drug Administration; SPA - Special Protocol Assessment; ATMP - Advanced Therapy Medicinal Product; EMA - European Medicines Agency; CAT - Committee for Advanced Therapies

AXAL: Cervical Cancer Studies

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Phase 2 Monotherapy

Metastatic Disease (PRmCC):

- Open-label GOG/NRG Study-0265 (N=50) 2-stage study
  - 12-mo OS of 38% (n=19/50)
  - Common AEs grade 1-2 nausea, chills, vomiting, hypotension
  - **Status:** Complete
- Open-label study (n=110) of AXAL* monotherapy or in combination with cisplatin in Indian women
  - 12-mo OS of 32% (n=35/109)
  - Common AEs grade 1-2 chills, fever, vomiting
  - **Status**: Complete

Phase 3 Monotherapy

Adjuvant Setting (HRLACC):

- **AIM2CERV**: Registrational international randomized placebo-controlled study in patients (n= 450) with high risk locally advanced cervical cancer
- **Status**: Enrolling

Metastatic Disease (PRmCC):

- Registrational international randomized trial in patients with recurrent, metastatic patients (n= ~300)
- **Status:** Protocol under development

Combination Therapy

Metastatic Cervical and Head & Neck cancers

- Phase 2 combination study with PD-L1 (durvalumab)
- Part A: Dose escalation to assess safety and identify a RP2D; Cohort 1: AXAL+ durvalumab 3 mg/kg (n=5); Cohort 2: AXAL+ durvalumab 10 mg/kg (n = 6)
- Parts A & B Expansion Cohorts:
  - Part A: AXAL monotherapy in head and neck (n = 20); safety only
  - Part B: Metastatic cervical (n = 40); 1:1 randomization to durvalumab 10 mg/kg (n = 20) or durvalumab 10 mg/kg + AXAL (n = 20); ORR and PFS; ‘go/no go’ decision

Status: Ongoing

PRmCC, Persistent Recurrent Metastatic Cervica; Cancer; HRLACC, High Risk Locally Advanced Cervical Cancer
*AXAL dose: IV $1x10^9$ CFU

STENDHAL SUMMARY

- Stendhal is a privately owned pharmaceutical company devoted to commercializing high specialty innovative products in Latin America.

- The company was founded in 1974, acquired in 1997 by its current owners, restructured and re-launched in 2004.

- Stendhal has built solid Business Partnerships with World Class Pharmaceuticals Companies to bring therapies for HIV, Multiple Sclerosis, Mucopolysaccharidosis, and Cardio-Metabolic diseases to its Latin American Markets.

- Advaxis and Stendhal have entered into a co-development and commercialization agreement, for Advaxis' lead Lm Technology™ Immunotherapy, axalimogene filolisbac (ADXS-HPV), in HPV-associated cancers.

- This new partnership with Advaxis will expand Stendhal growing portfolio in Oncology and is one of the first of its kind in Latin America to make cancer immunotherapies available in the region.

Phase 2 GOG 0265: Study of Axalimogene Filolisbac (AXAL) in 50 Patients with Persistent or Recurrent Metastatic Cervical Cancer

Persistent or recurrent squamous or nonsquamous cell carcinoma, adenosquamous carcinoma, or adenocarcinoma of the cervix

Two-stage Trial Design

Stage 1
N=26
axalimogene filolisbac q28d X 3

Safety, tolerability and efficacy hurdle met for initiation of Stage 2

Stage 2
N=37
axalimogene filolisbac q28d
Until PD, unacceptable toxicity, or consent withdrawn

Endpoints

Primary:
12-month OS, tolerability/safety

Secondary:
PFS
OS
ORR

Study sponsored by Advaxis and Cancer Therapy Evaluation Program and coordinated by the Gynecologic Oncology Group (GOG) in collaboration with the National Cancer Institute.

https://www.clinicaltrials.gov/ct2/show/NCT01266460. Endpoints: ORR, objective response rate; OS, overall survival; PD, progressive disease; PFS, progression-free survival.
Tewari KS, et al. *Curr Oncol Rep*. 2005;7:419-434. On October 24, 2016, Advaxis announced early closure of stage 2 which is no longer enrolling.

Study GOG-0265: AXAL Outperforms All Historical GOG Studies in Metastatic Cervical Cancer With 38% 12-Month Overall Survival

"These (0265) data demonstrate a meaningful improvement in 12-month OS rate compared to historical GOG studies."

– **Warner K. Huh, MD**
Director, Division of Gynecologic Oncology at the University of Alabama, Birmingham, and lead investigator of study GOG-0265

Phase 2 Study Underway with Axalimogene Filolisbac In Combination with Durvalumab to Treat Cervical and Head and Neck Cancers

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Part 1: Dose Escalation, Dose Determination

Axalimogene Filolisbac + durvalumab combination

- N=11 enrolled/treated to date
- Axalimogene Filolisbac: $1x10^9$ (fixed)
- durvalumab: 3+3 dose-confirmation

Dose Level 1: 3 mg/kg, N=5 cervical cancer

Dose Level 2: 10 mg/kg, N=3; cervical cancer; N=3; HPV+ SCCHN

Part 1 Objectives

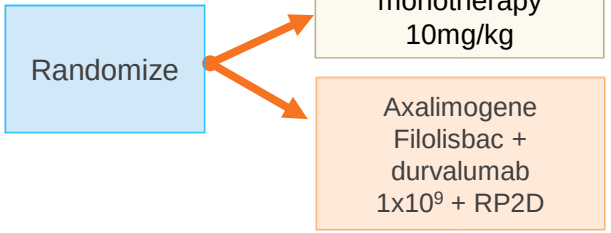
- Safety
- Tolerability
- RP2D

Expansion Phase

N= 20

Axalimogene Filolisbac + durvalumab (RP2D) in SCCHN only

Part 2: N=90 **Cervical Cancer Only**



Part 2

Objectives:

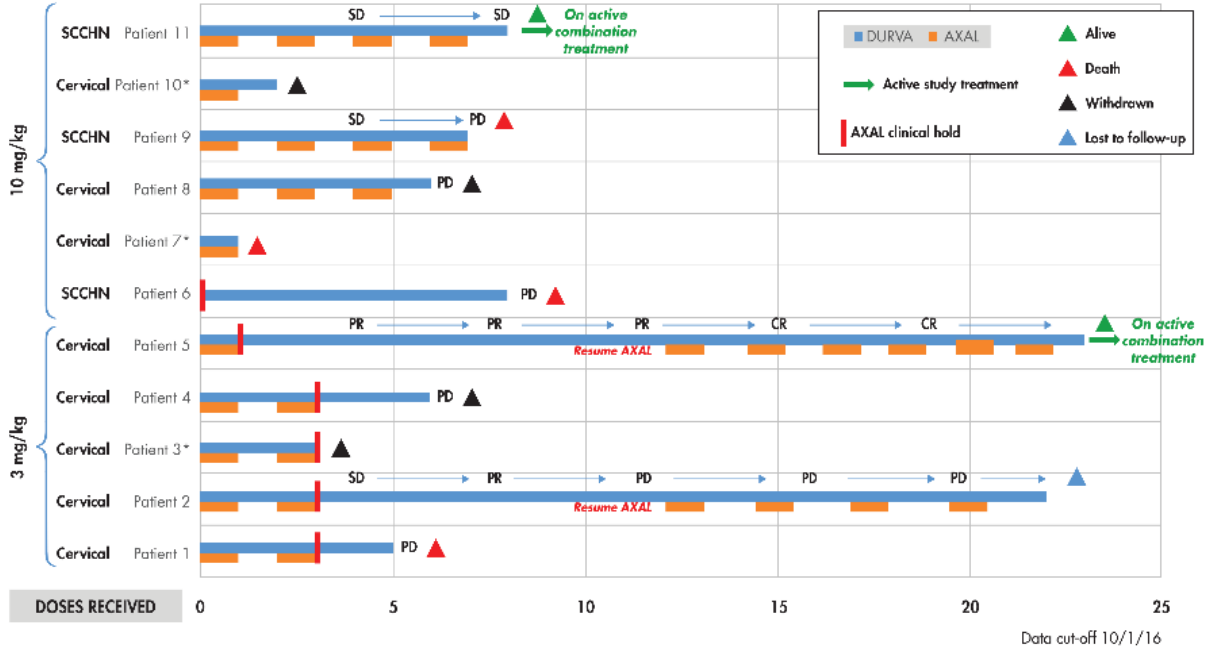
- PFS
- Overall safety
- Tumor response

In collaboration with: AstraZeneca

HPV, human papillomavirus; RP2D, randomized phase 2 dose; SCCHN, squamous cell cancer of head and neck.

Axalimogene Filolisbac + Durvalumab: Encouraging preliminary activity with 1 CR to date

Patient Disposition, Treatment Received, and Response Assessment



Preliminary Safety Findings

- TRAEs included chills and/or rigor, nausea, hypotension, diarrhea, fatigue, tachycardia & headache
- 2 patients experienced grade 3 chills and/or rigors; 1 patient experienced grade 3 diarrhea; 1 patient experienced grade 4 hypotension.

Preliminary data indicate encouraging antitumor activity of the combination immunotherapy regimen

*In 3 patients (Patients 3, 7, and 10) no response assessment was made because a post-baseline scan was not obtained prior to elective study withdrawal.

Axalimogene Filolisbac + Durvalumab: 49-Year-old Patient Achieves Complete Response at Dose Level 1

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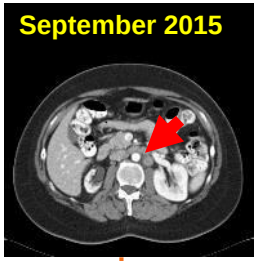
Diagnosis: 49 y/o woman -squamous cell carcinoma of the cervix

2011 — Treated three rounds of systemic chemotherapy

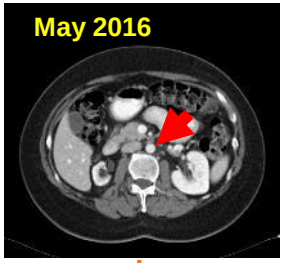
2013

2015



Axalimogene Filolisbac - **1×10^9 CFU**
+
durvalumab - **3 mg/kg**

Sep '15 – May '16



Oct 2015 | Nov 2015 | Dec 2015 | Jan 2016 | Feb 2016 | Mar 2016 | April 2016 | May 2016 | June 2016 | Jul 2016 | Aug 2016

← Clinical Hold →

September 2015
Enrolled study with metastatic cervical cancer refractory to treatments

Jan 2016
Partial Response

May 2016
PET/CT Scan
Complete Response

Axalimogene Filolisbac 1×10^9 CFU

durvalumab 3 mg/kg

Results may not be typical; further study is warranted.

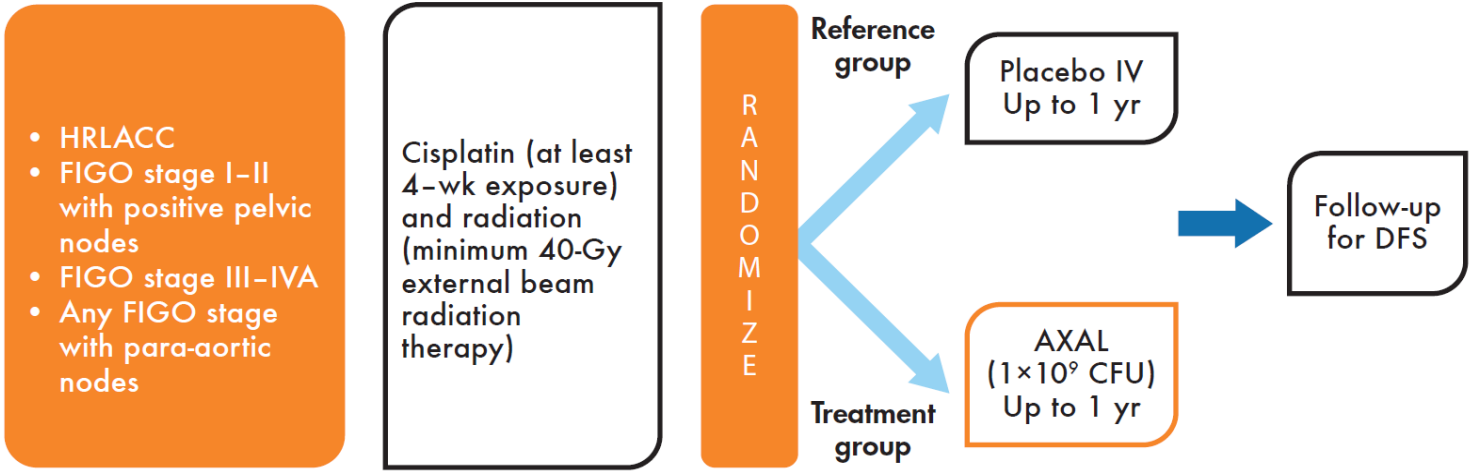
Preliminary Safety

- Grade 1 transient chills, fatigue, fever, nausea, vomiting, headache, hypotension
- Grade 2 rigors

AXAL Adjuvant Monotherapy (AIM2CERV): Phase 3 Study to Prevent Recurrence in High-Risk Cervical Cancer

AIM2CERV
ADJUVANT IMMUNOTHERAPY TO PREVENT CERVICAL RECURRENCE

Randomization 1:2 Between Reference and Treatment Groups



Baseline tumor imaging must be performed within 28 days prior to the first study treatment infusion

Randomization 2:1 Reference and Treatment groups

Primary objective is DFS

GOG Gynecologic Oncology Group

AIM2CERV – AXAL Immunotherapy Following Chemo/Radiation in Patients who have High Risk Locally Advanced Cervical Cancer (HRLACC)

CFU, colony-forming unit; DFS, disease-free survival; FIGO, International Federation of Gynecology and Obstetrics; HRLACC, high-risk locally advanced cervical cancer; IV, intravenous.

1. Herzog T, et al. SITC 2016. Poster 145.

Key Inclusion Criteria

- Histological diagnosis of squamous cell, adenocarcinoma or adenosquamous carcinoma of the cervix who have undergone definitive therapy with a curative intent
- Subjects may have:
  Stage IB2, IIA2, IIB with any of the following pelvic lymph node metastases criteria:
  - Biopsy proven pelvic node(s)
  - 2 or more positive nodes by MRI/CT ≥1.5cm shortest dimension
  - 2 or more positive pelvic nodes by PET with standard uptake value ≥2.5
- -or- All Stage IIIA, IIIB, IVA
- Any FIGO stage with para-aortic lymph node metastases criteria (defined by 1 of the following):
- Biopsy proven para-aortic node(s)
- 1 or more positive para-aortic node(s) by MRI/CT >1.5 cm shortest dimension
- 1 or more positive para-aortic node(s) by PET with SUV >2.5

Key Exclusion Criteria

AIM2CERV
ADJUVANT IMMUNOTHERAPY TO PREVENT CERVICAL RECURRENCE

Subjects:

- Who have not achieved disease-free status
- With FIGO stage IVB
- Who have undergone a previous hysterectomy (partial / subtotal can participate)
- Who have implanted medical device(s) that pose a high risk for colonization and/or cannot be easily removed
- Who are receiving, plan, or anticipate on receiving PI3K or TNFα
- Have a contraindication (sensitivity or allergy) to trimethoprim/sulfamethoxazole and ampicillin

AIM2CERV: Current Status and Estimated Timelines

- Phase 3 trial under Special Protocol Assessment with FDA (July 2016)
- Expected to enroll 450 patients across 150 global sites
- 8 US sites currently open; actively screening patients (currently, 42 sites targeted)
- Ex-US sites expected to open beginning in Q1 2017
- Trial status updates will be provided at beginning of year and mid-year business outlooks
- Estimated trial timeline
  - 50% patient enrollment 1H 2018
  - Last patient enrollment: 4Q 2018
  - Study completion: 2H 2020
- Event-driven study: 184 events (recurrence or death due to any cause) required prior to efficacy analysis