



**ADVAXIS**  
IMMUNOTHERAPIES™

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**Corporate Presentation**  
**July 2018**

**Nasdaq: ADXS**

# Forward-Looking Statements

This presentation contains forward-looking statements, including, but not limited to, statements regarding Advaxis' ability and strategies to develop and commercialize cancer immunotherapies, timing of planned clinical trials and regulatory milestones, potential partnership opportunities and the safety and efficacy of Advaxis' proprietary immunotherapies. These forward-looking statements are subject to a number of risks including the risk factors set forth from time to time in Advaxis' SEC filings including, but not limited to, its report on Form 10-K as well as its Forms 10-Q and 8-Ks, which are available at <http://www.sec.gov>.

Any forward-looking statements set forth in this presentation speak only as of the date of this presentation. We do not intend to update any of these forward-looking statements to reflect events or circumstances that occur after the date hereof other than as required by law.

# Investment Highlights

- Global immuno-oncology market is forecasted to exceed **\$100B** in the next few years
- Current immuno-oncology market is dominated by checkpoint inhibitors (CPIs) that have somewhat limited efficacy in many tumor types
- Our solution: A differentiated approach to fight cancer which leverages our proprietary *Listeria monocytogenes* (*Lm*) platform with increasingly better payloads
  - Unique antigen-presenting platform which trains and mobilizes the immune system to attack cancer cells
  - Proof of concept demonstrated in cervical cancer with ADXS-HPV where we have seen a number of complete and partial responses
  - Intriguing early data in prostate cancer with ADXS-PSA
- Focusing on the neoantigen space, which has the potential to transform cancer treatment
  - Personalized, neoantigen product candidates (ADXS-NEO) in partnership with Amgen with first patient dosed in June 2018
  - Cancer-type specific product candidates targeting public neoantigens in high value tumor types (ADXS-HOT)
    - Plan to file four INDs for four different tumor types in our ADXS-HOT program by end of 2019
    - First IND submitted for non-small cell lung cancer (NSCLC) with first patient expected to be dosed by end of 2018
    - Second ADXS-HOT product candidate for prostate cancer; IND to be submitted by end of 2018

# Clinical Pipeline Overview

	CANCER INDICATION		IND	PHASE 1	PHASE 2	PHASE 3
<b>AXAL</b>	AIM2CERV, High-Risk, Locally Advanced Cervical		▶			
	Metastatic Cervical: Combination with durvalumab	AstraZeneca 	▶			
	HPV+ Head and Neck	~70% of head-and-neck cancers are HPV+	★	▶		
<b>ADXS-PSA</b>	Metastatic Prostate Combination with KEYTRUDA® (pembrolizumab)	 MERCK	▶			
<b>ADXS-NEO</b>	Multiple Cancers by Targeting Personal Neoantigens	AMGEN 	▶			
<b>ADXS-HOT</b>	Non-Small Cell Lung		2018	IND Submitted		
	Prostate		★	2018		
	HOT Construct 3*	* Future ADXS-HOT constructs will be selected from the following five tumor types: Breast, colorectal, bladder, ovarian, head and neck cancers	★	2019		
	HOT Construct 4*		★	2019		

Advaxis Funded

Partner Funded

★ = Planned

# The *Lm* Platform: Foundational Science

***Lm* vectors mimic natural infection and redirect immune response against cancer through:**

- 1. INNATE IMMUNITY:** *Enhanced antigen presentation activates multiple pathways* and alerts and trains the immune system
- 2. ADAPTIVE IMMUNITY:** Mobilizes and generates a *cancer-specific T cell* response to attack the tumor
- 3. CHANGES TO TUMOR MICROENVIRONMENT (TME):** *Reduces protective cells (Tregs and MDSCs) in the TME* that shield the tumor from the immune system

The *Lm* platform has been clinically evaluated in more than 500 patients across multiple clinical trials.

# Lm Technology Evolution: Higher Number and Better Targets / Payload

## ADXS-HPV (AXAL)

**Clinical data:** Prolonged survival and complete responses in cervical and anal cancer patients (monotherapy)

## ADXS-PSA

**Clinical evidence** of disease stabilization and antigen spreading in prostate cancer patients along with reductions in levels of PSA

## ADXS-NEO

**Personalized, patient-specific** products based on sequencing of each patient's tumor

## ADXS-HOT

**Cancer type-specific** products based on commonly expressed public hotspot mutations and proprietary cancer antigens

### Advaxis increasing focus on neoantigen programs

- Highly innovative targets
- Higher number of targets per drug candidate
- Optimized vector to enhance antigen presentation
- High value cancer indications

# Why are We Focused on Neoantigens?

- Mutations cause cancer and also create neoantigens
- Neoantigens are only found in cancer cells which makes them good therapeutic targets
- T cells that target neoantigens are the common link among successful immunotherapies developed to date; e.g. checkpoint inhibitors, TILs
- Our Lm platform is effective at generating T cells that target multiple neoantigens
  - Preclinical data demonstrate that over 90% of neoantigens in an ADXS-NEO vector generated T cell responses that controlled tumor growth<sup>1</sup>
  - Large capacity allows for simultaneous presentation of greater than 20 neoantigens
- Neoantigen vaccines can work alone or in combination with other cancer therapies

**ADX-NEO**

*Patient-specific therapies  
targeting personal neoantigens  
based on sequencing of each  
patient's tumor*

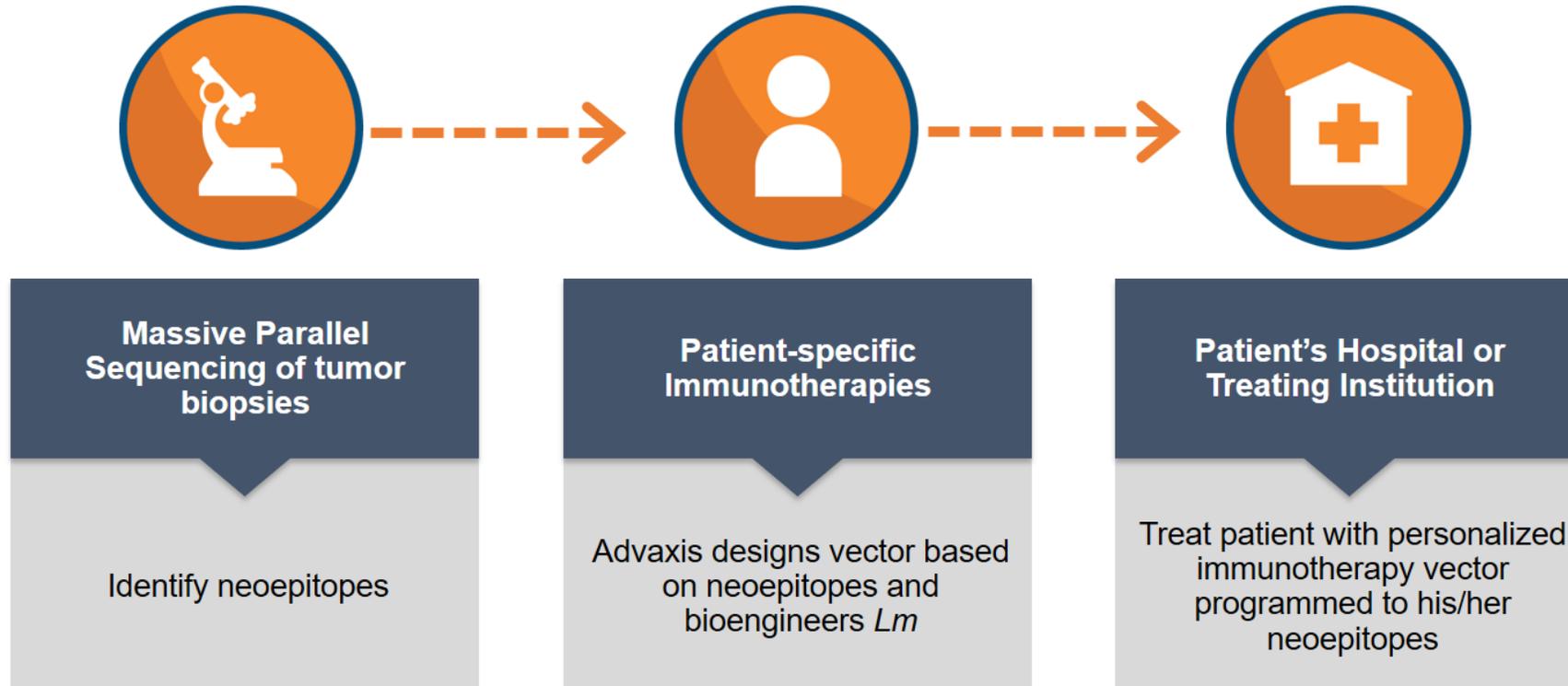


# ADX-NEO: *Lm* Platform in Personalized Medicine

- ADXS-NEO is a truly personalized approach, whereby the patient's immune system is activated to create a targeted T cell response to their personal neoantigens based on their unique mutations
- The *Lm* platform's impact on the immune system (i.e., innate immunity, adaptive immunity, and changes to the TME) provides potential for strong anti-cancer effects
- The *Lm* platform's capacity allows for targeting a large number of personal neoantigens
- Recognizing these attributes, Amgen partnered with Advaxis for the development of ADXS-NEO

In partnership with **AMGEN**®

# The Personalized ADXS-NEO Approach



Needle-to-needle in ~8 weeks

## A Phase 1 dose-escalation study of ADXS-NEO expressing personal tumor antigens

★ First patient dosed June 2018

### Tumor Types:

- Metastatic microsatellite stable **colon cancer**
- Metastatic squamous histology **head-and-neck cancer**
- **Metastatic non-small cell lung cancer**



### Dose-escalation Phase

n = 9-18  
3 + 3 design  
1 x10<sup>9</sup>, 2 x10<sup>9</sup>, or  
4 x10<sup>9</sup> CFU  
Q3 weekly

### Expansion Phase

n=30 (10 per tumor type)  
Up to 1 year dosing



### Endpoints:

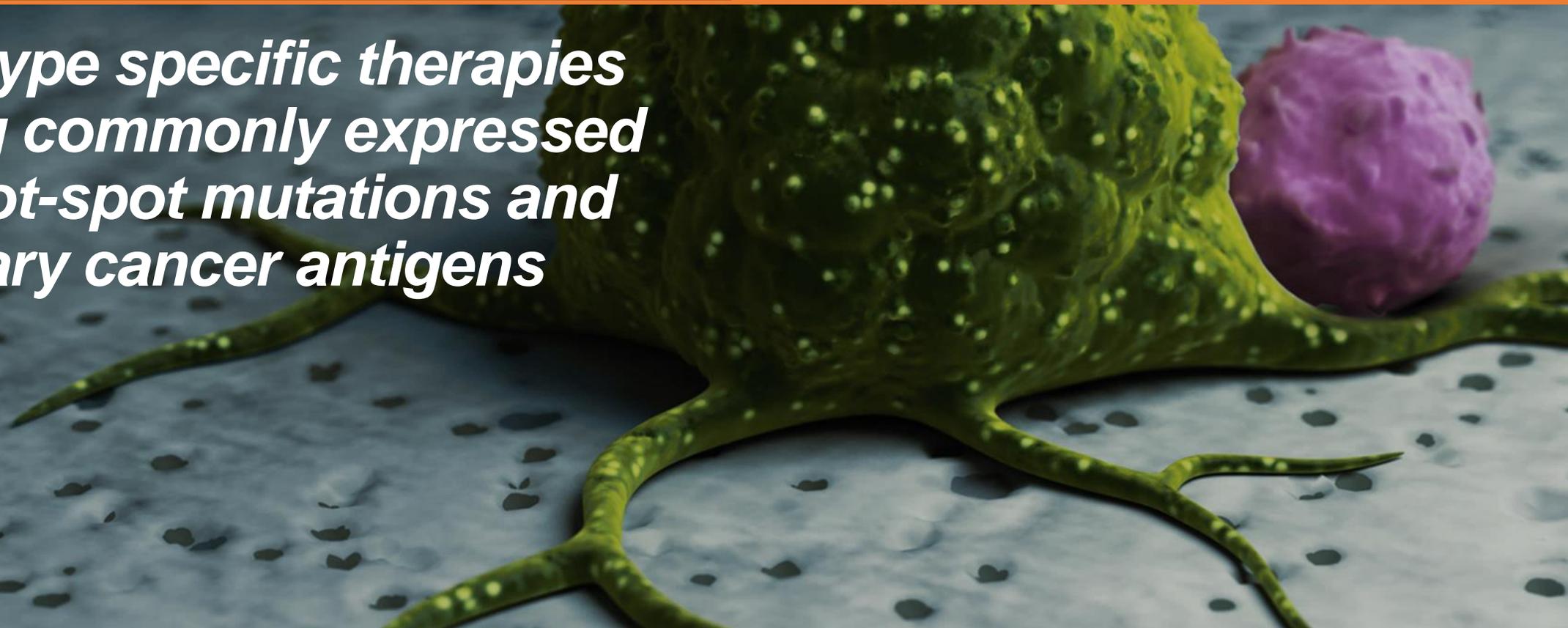
**Primary**  
Tolerability/Safety

**Secondary**  
Clinical activity  
RP2D

**Exploratory**  
Immunological

## **ADXS-HOT**

***Cancer-type specific therapies  
targeting commonly expressed  
public hot-spot mutations and  
proprietary cancer antigens***



# ADXS-HOT

## Cancer-Type Specific Approach

- ADXS-HOT constructs target both public, or shared, hotspot neoantigens and multiple proprietary tumor associated antigen targets such as oncofetal antigens (OFAs) and cancer testis antigens (CTAs), providing broad patient coverage in most common tumor types
  - Hotspots are somatic mutations frequently observed in multiple patients, often in tumor driver genes contributing to oncogenesis
  - Many OFA/CTAs have primary roles in oncogenesis
  - Because of OFA/CTAs highly restricted tissue expression in cancer, they are attractive targets for immunotherapy
- ADXS-HOT constructs can include over 30 targets allowing for multiple shots on goal to control the tumor

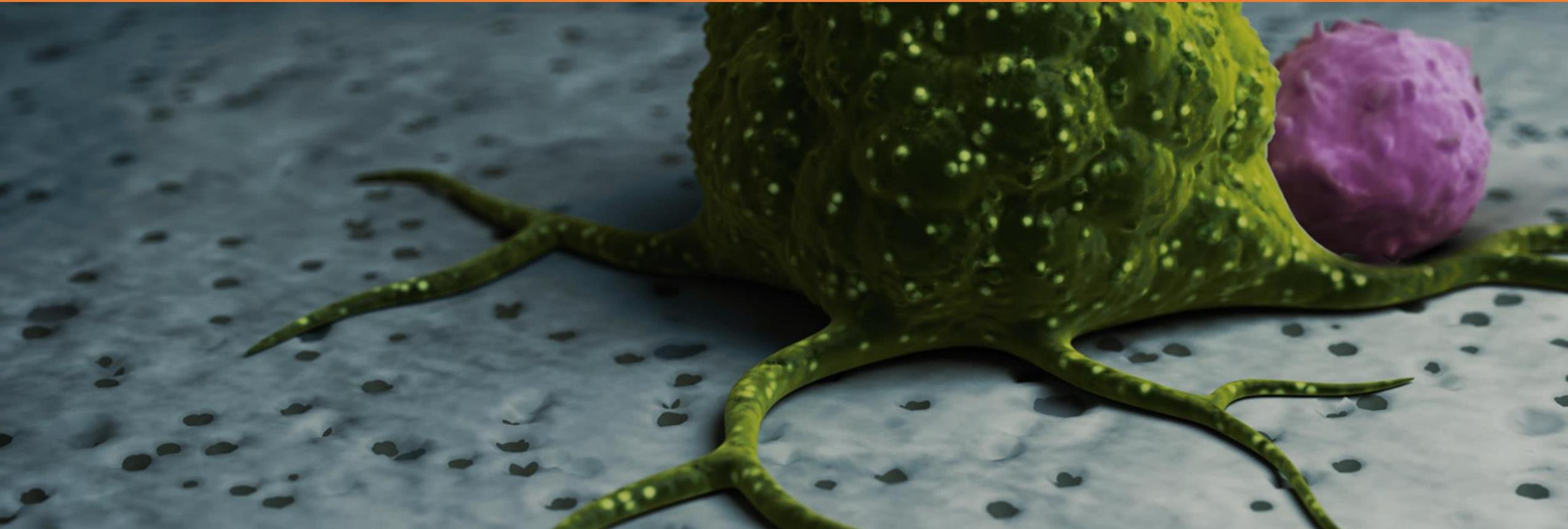
# ADXS-HOT Program Overview

- Multiple high-value product opportunities
  - HOT products are cancer type specific
  - Lead products identified (NSCLC, prostate)
  - Over 10 constructs identified to-date
  - Exclusivity anticipated through 2037
- HOT constructs impact innate immunity, adaptive immunity and changes to the TME
- HOT product candidates contain a broad range of antigen targets making them suitable for all patients with a given tumor type; no personalization is required
- Off-the-shelf treatment; favorable cost of goods
- Approximately 2 months from concept to clinic
- First IND submitted for ADXS-503 (NSCLC); prostate IND to be submitted by end of 2018; 2 additional by end of 2019 selected from breast, colorectal, bladder, ovarian, head-and-neck cancers

# ADVAXIS

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## Corporate Information



- Own or have rights to over 400 patents and applications
- Filing strategy provides for broad coverage opportunities across **multiple disease platforms** and **combination therapies**
- Multiple provisional applications submitted
  - Claims directed to composition of matter and methods
- IP portfolio includes patents and patent applications related to:
  - **Proprietary *Lm* Technology constructs** for multiple cancer indications:  
(Prostate, lung, pancreatic, bladder, breast, CRC, ovarian)
  - **Proprietary targets** engineered for shared **hotspot mutations** across various malignancies
  - **Proprietary targets** optimized for **tumor specificity**, **antigen** expression and **reactivity** with tumor-associated antigens
- Earliest patent coverage on platform *Lm* Technology will expire ≈ 2029

# Partnerships

Program	Partner	Description
<b>AXAL</b> (axalimogene filolisbac)	Actively seeking partner for cervical cancer program	US and Europe development and commercial rights
<b>ADXS-PSA</b>		Clinical collaboration with Keytruda
<b>ADXS-NEO</b>		Global license agreement
<b>ADXS-HOT</b>	In discussions with multiple parties	
<b>ADXS-HER2</b>		Veterinary rights; US approval for canine osteosarcoma

# Capital Structure and Cash Position

- 52.6 million shares outstanding, 61.4 million, fully diluted
  - 3.1 million warrants outstanding at an exercise price of \$5.00, expiring in Oct '18
- Cash on hand: \$58.8 million as of April 30, 2018 (no debt)
- Reduced cash burn in June 2018 to ~\$50M/year

# Executive Management Team



**Kenneth A. Berlin**  
Chief Executive Officer

ROSETTAGENOMICS™

**Ortho**  
Clinical Diagnostics

VERIDEX  
LLC

Johnson & Johnson



**Robert Petit**  
Chief Scientific Officer



PHARMACIA



AESGEN



**Dr. Andres Gutierrez**  
Chief Medical Officer



**Molly Henderson**  
Chief Financial Officer



# Multiple Milestones Over Next 18 Months

PROGRAM	MILESTONE	TARGET / STATUS
ADXS-HPV (axalimogene filolisbac)	<ul style="list-style-type: none"> <li>Announce planned IST in Head and Neck Cancer</li> </ul>	2018
ADXS-PSA	<ul style="list-style-type: none"> <li>Metastatic Prostate Ph1/2 Combination with pembrolizumab</li> <li>Part B Monotherapy Combination Therapy Data (12-mo PFS and OS)</li> </ul>	Q1 2019
ADXS-NEO	<ul style="list-style-type: none"> <li>Ph 1 clinical trial in MSS-CRC, H&amp;N and NSCLC</li> <li>First patient treated</li> <li>Clinical data from initial cohort (safety, immunological, early signals of efficacy)</li> </ul>	June 2018 2019
ADXS-HOT NSCLC	<ul style="list-style-type: none"> <li>IND Filing</li> <li>First in Human</li> </ul>	Submitted July 2018 End 2018
ADXS-HOT Prostate	<ul style="list-style-type: none"> <li>IND Filing</li> </ul>	Submitted by End 2018
ADXS-HOT Other	<ul style="list-style-type: none"> <li>2 additional IND Filings</li> <li>Selected from Breast, bladder, ovarian, MSS-CRC, H&amp;N</li> </ul>	By End 2019

# Pathway to Creating Shareholder Value

- Redefined company focus on high-value assets by streamlining the HPV program
  - Seeking partner for AXAL in cervical cancer in the US and Europe
  - Discussing IST opportunity for AXAL in HPV+ head-and-neck cancer
- Positioning the company for success in the neoantigen field
  - NEO:
    - First patient dosed in June 2018
    - Amgen partnership
  - HOT:
    - First IND submitted in June 2018 (NSCLC); second to be submitted by end 2018 (prostate)
    - 2 additional INDs planned by end of 2019, selected from breast, colorectal, bladder, ovarian, head-and-neck cancers
- Initiated plans to reduce cash burn by over 38% to approximately \$50 million annually
  - Wind-down and/or partnering of non-focus programs
  - Reductions in headcount: 24% of work force
- Experienced executive team in place



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