# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

#### FORM 8-K

## **CURRENT REPORT Pursuant to Section 13 or 15(d)**

of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): November 14, 2017

## PIERIS PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in its Charter)

Nevada (State of Incorporation)

001-37471 (Commission File Number) EIN 30-0784346 (IRS Employer Identification No.)

255 State Street, 9th Floor
Boston, MA 02109
United States
(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: 857-246-8998

	ck the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under of the following provisions:				
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)				
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)				
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))				
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))				
	Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).				
Eme	rging Growth Company ⊠				
	If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. $\Box$				

#### Item 7.01 Regulation FD Disclosure.

Attached hereto as Exhibit 99.1 and incorporated by reference herein is an investor presentation of Pieris Pharmaceuticals, Inc.

The information set forth under this "Item 7.01. Regulation FD Disclosure," including the exhibits attached hereto, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing.

#### Item 9.01 Financial Statements and Exhibits

(d) Exhibits.

99.1 <u>Investor Presentation of Pieris Pharmaceuticals, Inc., dated November 2017.</u>

#### **SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: November 14, 2017 PIERIS PHARMACEUTICALS, INC.

By: /s/ Allan Reine

Name: Allan Reine

Title: Chief Financial Officer



#### Forward Looking Statements

Statements in this presentation that are not descriptions of historical facts are forward-looking statements that are based on management's current expectations and assumptions and are subject to risks and uncertainties. In some cases, you can identify forward-looking statements by terminology including "anticipates," "believes," "can," "continue," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would" or the negative of these terms or other comparable terminology. Factors that could cause actual results to differ materially from those currently anticipated include, without limitation, risks relating to the results of our research and development activities, including uncertainties relating to the discovery of potential drug candidates and the preclinical and clinical testing of our drug candidates; the early stage of our drug candidates presently under development; our ability to obtain and, if obtained, maintain regulatory approval of our current drug candidates and any of our other future drug candidates; our need for substantial additional funds in order to continue our operations and the uncertainty of whether we will be able to obtain the funding we need; our future financial performance; our ability to retain or hire key scientific or management personnel; our ability to protect our intellectual property rights that are valuable to our business, including patent and other intellectual property rights; our dependence on third-party manufacturers, suppliers, research organizations, testing laboratories and other potential collaborators; our ability to successfully market and sell our drug candidates in the future as needed; the size and growth of the potential markets for any of our approved drug candidates, and the rate and degree of market acceptance of any of our approved drug candidates; developments and projections relating to our competitors and our industry; our ability to establish collaborations; our expectations regarding the time which we will be an emerging growth company under the JOBS Act; our use of proceeds from this offering; regulatory developments in the U.S. and foreign countries; and other factors that are described more fully in our Annual Report on form 10-K filed with the SEC on March 30, 2017. In light of these risks, uncertainties and assumptions, the forward-looking statements regarding future events and circumstances discussed in this report may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. You should not rely upon forwardlooking statements as predictions of future events. The forward-looking statements included in this presentation speak only as of the date hereof, and except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation to conform these statements to actual results or to changes in our expectations.



## Pieris Investment Opportunity

- · Robust pipeline of a novel class of therapeutics
  - Anticalin® proteins
- Potentially transformative, wholly owned immuno-oncology (IO) program
  - Tumor-targeted 4-1BB bispecific
- Validating pharmaceutical partnerships in IO, respiratory and other therapeutic areas
  - \$80M in upfront payments in 2017, \$4.5B in milestone potential
- First-in-class, inhaled Anticalin protein targeting IL-4Ra
  - partnered with AstraZeneca
- · Next-generation bi/multispecific IO platform
  - To exploit costimulatory and checkpoint targets
- · Novel inhaled biologics platform













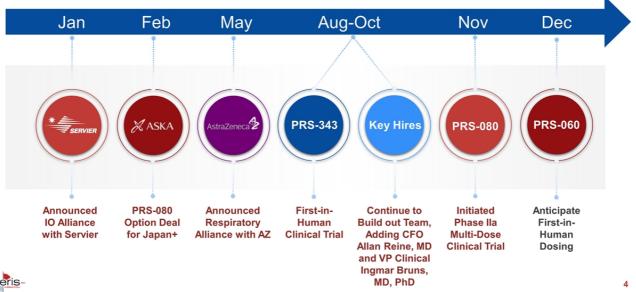






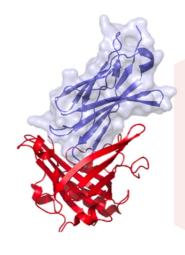


## Pieris has Executed well in 2017 on a Value-Creating Strategy





## Anticalin Proteins – A Novel Therapeutic Class

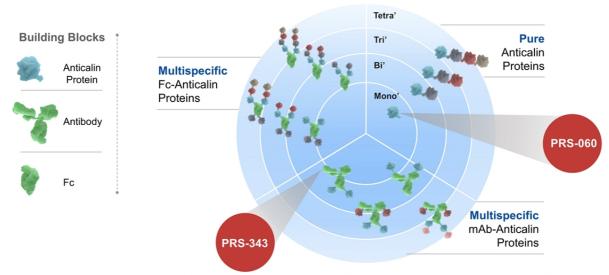


# Features Derived from lipocalins (human epithelial proteins) Engineerable binding pocket Engineerable scaffold Comparison of the positive of the positive



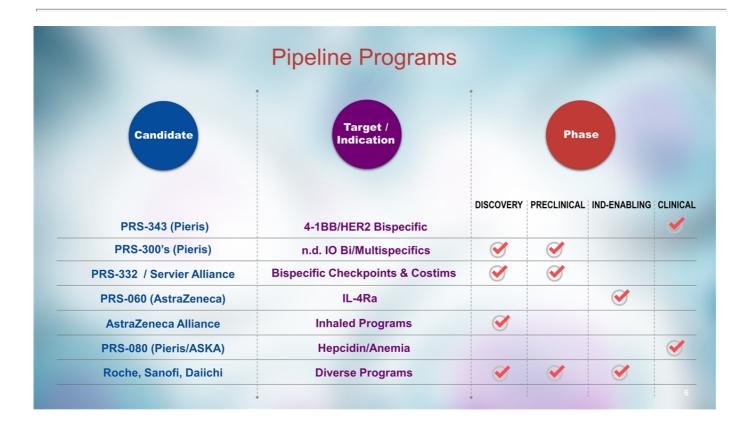
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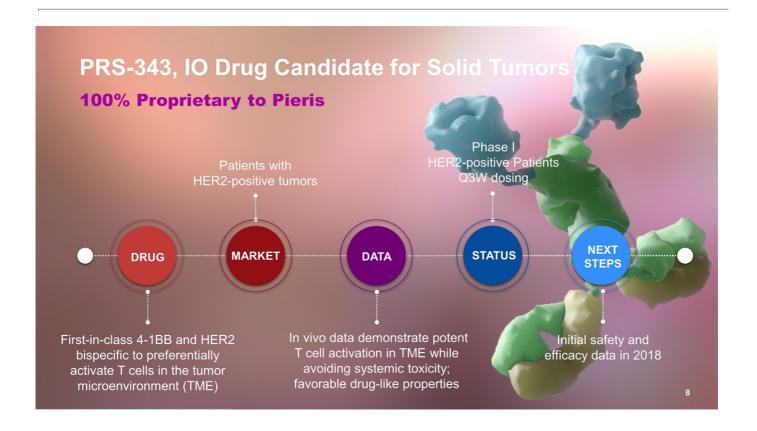
## Anticalin Protein-based Drug Candidates can be Tailored to Multiple Formats



Potent Multi-target Engagement • Novel Inhaled and Multispecific MoA • Favorable Drug-like Properties 6







## PRS-343 US Market Opportunity



Cancer Type	Prevalence (US) <sup>1</sup>	Line of Therapy	Line of Therapy Size (%)	HER2+ Rate (%)	Addressable Population (US)
Breast Cancer	3,327,552	3 <sup>rd</sup> Line	~9 %	20 %2	59,495
Bladder Cancer	696,440	3 <sup>rd</sup> Line	~4 %	43 %³	10,705
Gastric Cancer	76,829	2 <sup>nd</sup> Line	~23 %	22 %4	3,942
Uterine (Endometrial) Cancer	710,228	1 <sup>st</sup> Line	~12 %	25 % <sup>5</sup>	20,827
Ovarian Cancer	222,060	2 <sup>nd</sup> Line	~32 %	7 %6	4,278

Additional potential tumor types include e.g. Biliary, NSCLC, Esophageal, Colorectal and Cervical Cancer

 Multi-billion dollar market opportunity in HER2-positive cancers, well over 100K addressable patients in the US alone.

1) Surveillance, Epidemiology, and End Results (SEER) Program 2) Schmidt, C. J Natl Cancer Inst. 2010; 3) Krüger, S, et al. Int. J. Cancer. 2002; 4) Yano et al. J Clin Oncol, 2004; 5) Livasy, C.A., et al. Gyn Onc. 2006; 6) Twefferd M, et al. PLOS DNE. 2005.



# PRS-343 is a First-in-class Bispecific TME-activated Costimulatory Agonist



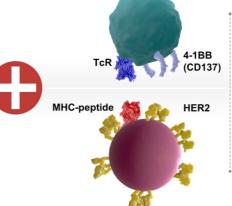
#### 4-1BB (CD137) - Key Costimulatory Target

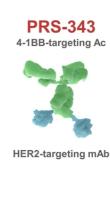
- · Marker for tumor-specific T cells in TME
- · Ameliorates T cell exhaustion
- · Critical for T cell expansion
- · Induces anti-tumor cytolytic activity
- Drives central memory T cell differentiation for sustained response

### HER2 – Strongly Validated Tumor Target

- · Restricted expression on normal tissue
- Multiple HER2+ tumors with high-unmet need
  - Breast, Gastric & Bladder; several others
  - Mediates drug mobilization and immune receptor activation within the tumor bed

#### Tumor-specific T Cell





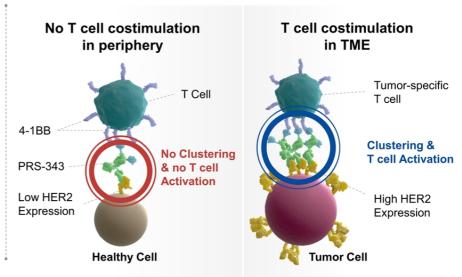
**Tumor Cell** 



# Concept: Tumor-localized Costimulation with PRS-343 (Bispecific 4-1BB Engager)



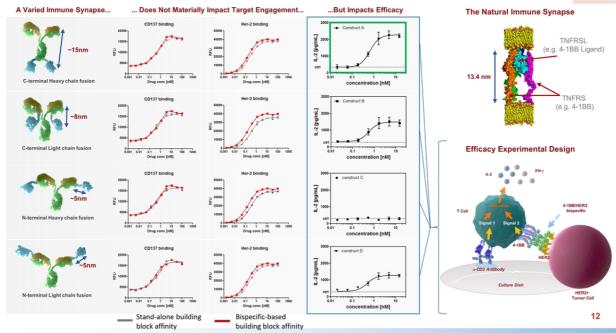
- 4-1BB is activated via high-order clustering
- Tumor receptor-mediated clustering of bispecifics drives 4-1BB-mediated T cell activation
- Maintained tumor antigen specificity by T cell receptor may lead to safety advantages





## Bispecific Geometry Impacts Immune Synapse, Efficacy



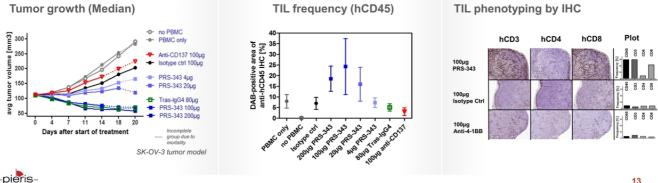




#### PRS-343 Shows Bifunctional Activity - Dose-dependent Tumor Growth Inhibition & CD8(+)TIL Expansion in HER2+ Ovarian Cancer Model



- · PRS-343 shows dose-dependent tumor growth inhibition, which is dominated by anti-HER2 activity
- PRS-343 leads to strong and dose-dependent lymphocyte infiltration in tumors; monospecific anti-HER2 mAb (IgG4 backbone) lacks this activity
- Monospecific anti-4-1BB benchmark mAb shows insignificant response compared to isotype control and no significant tumor infiltration of lymphocytes

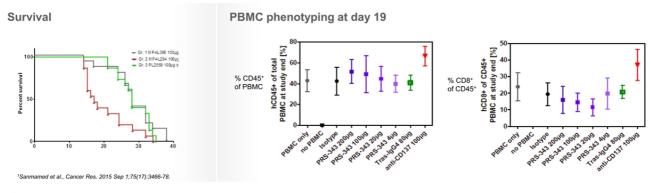




# PRS-343 Avoids Unwanted Effect of Peripheral T Cell Activation, Unlike Systemic 4-1BB Agonist mAb



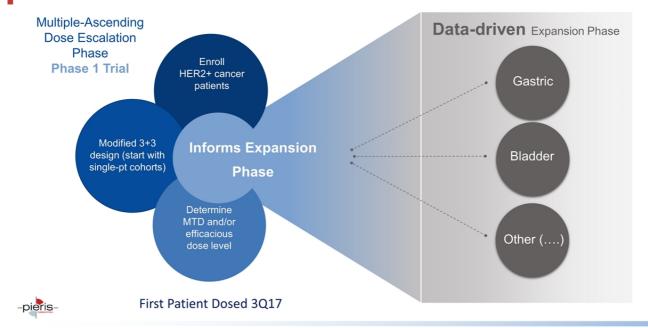
- Unlike PRS-343, anti-4-1BB benchmark mAb shows accelerated graft-versus-host-disease with significant mortality in line with literature data<sup>1</sup>
- Toxicity observed with mAb likely corresponds to indiscriminate peripheral T cell activation





## PRS-343 First-in-Patient Clinical Trial





# Beyond Wholly Owned PRS-343... Pieris has Partnered Several IO Bispecifics with Servier while Retaining US Rights



#### Alliance Highlights

5 committed + 3 optional novel IO programs

Including PRS-332 (PD-1-based bispecific)

Retained co-development and full US commercial rights on PRS-332 and up to 3 additional programs

~\$30M upfront, up to ~\$1.8B in milestones, up to low double-digit royalties

"True Partnership" – equal voice, shared strategic vision and resources



#### Partner Overview

France's second largest pharmaceutical company

Deep commitment to R&D with \$1B research budget

Oncology as one of its core areas, portfolio includes marketed products such as Lonsurf® and Puxuvri®

## Strategic Implications of Partnership

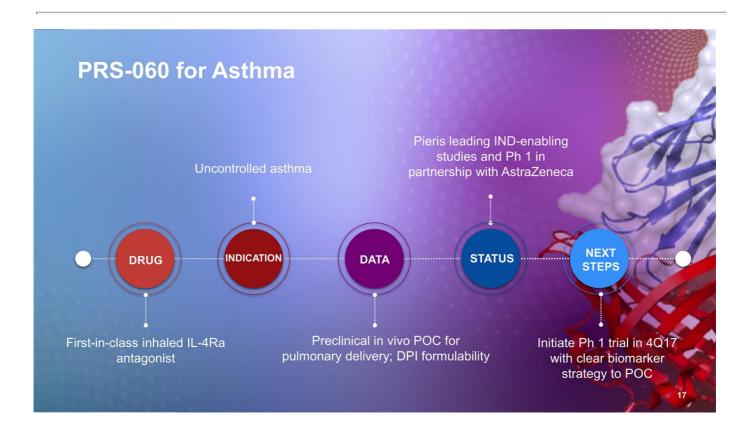
Validates Pieris' unique multispecifics formats and approach

Free cash flow extends runway and enables increased investments

PRS-343 still 100% Pieris owned

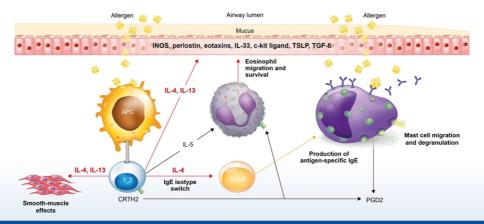
Pieris is free to enter into additional IO partnerships





# IL-4Ra is the Broadest Established Intervention Point in the Th2 Pathway





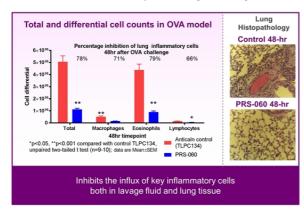
IL-4 & IL-13 are main Th2 cytokines involved in asthma, both signal via IL-4Ra
 Anti-IL-4Ra mAb (dupilumab) – best-in-class among late-stage/approved biologics
 67% reduction in exacerbations in phase III (high eosinophilic asthma)

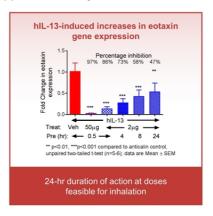


#### PRS-060 is a Localized IL-4Ra Antagonist for Uncontrolled Asthma



- First inhaled Anticalin protein to potently engage the highly validated asthma target, IL-4Ra
- Localized target engagement in lung tissue supports a rationale for a convenient, low-dose, low-cost alternative to systemically administered antibodies
- Preclinical in vivo POC for pulmonary delivery at doses supportive of daily administration



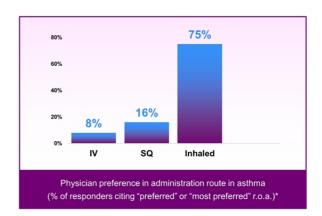




## PRS-060 has the Potential to Transform the use of Biologics in Uncontrolled Asthma



- A fraction of uncontrolled asthmatics are currently treated with biologics
- Uptake of biologics limited by several factors including; inconvenient in-office dosing, high price & biomarker restrictions
- PRS-060 as an inhaled protein is positioned to overcome these challenges
- An inhaled IL-4Ra blocker has the potential to become market leader and create new markets



\* Primary market research with prescribing physicians by Artisan Healthcare Consulting (on behalf of Pieris) in 2016



# Pieris has Partnered PRS-060 and Other Respiratory Programs with AstraZeneca, while Retaining Commercial Rights



#### **Alliance Highlights**

5 committed novel inhaled Anticalin protein programs

Including lead asthma program PRS-060 (IL-4Ra)

Retained co-development and cocommercialization (US) options on PRS-060 and up to 2 additional programs

~\$45M upfront, up to ~\$2.1B in milestones, plus double-digit royalties

Access to complementary formulation and device know-how for inhaled delivery

#### AstraZeneca 🕏

#### **Partner Overview**

In 2016, AZ's respiratory products generated over \$4.7 billion in worldwide sales

The respiratory portfolio includes 12 marketed products, e.g. franchises such as Symbicort® and Pulmicort®

Over 40 year experience in developing medicine for respiratory diseases

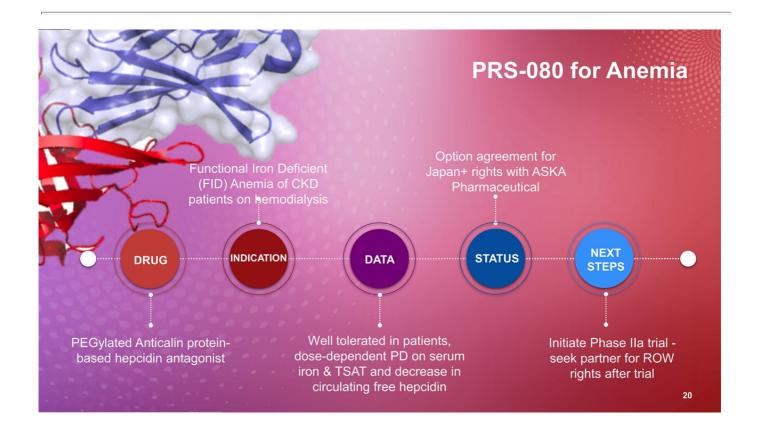
## Strategic Implications of Partnership

De-risks and accelerates development of respiratory pipeline

High-value opportunity for locally delivered biologics, including potential benefits in cost, convenience, safety and efficacy

Ability to forward-integrate into a high-value market beyond IO

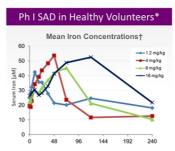


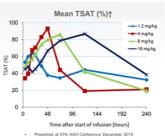


#### PRS-080 Shows Consistent Effects in Healthy Volunteers & CKD5 Patients - Ongoing Ph IIa Study will Evaluate Hemoglobin



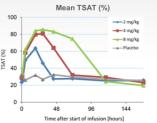
- In both healthy volunteers and CKD5 patients, PRS-080...
  - Was safe and well-tolerated
  - Showed a dose-proportional increase of PK parameters (data not shown)
  - Demonstrated dose-dependent PD effects on serum iron and TSAT
  - Led to an immediate dose-dependent decrease in circulating free Hepcidin (data
- Ph IIa trial underway in Germany and Czech Republic
  - Planning 5 QW infusions in ESRD FID anemia patients
  - Two dose cohorts: 4 mg/kg and 8 mg/kg body weigh (4 drug; 2 placebo per cohort)
  - Safety, tolerability hemoglobin (Hb) and reticulocyte concentration of Hb as endpoints
  - If data are positive, Pieris will seek to outlicense beyond Japan



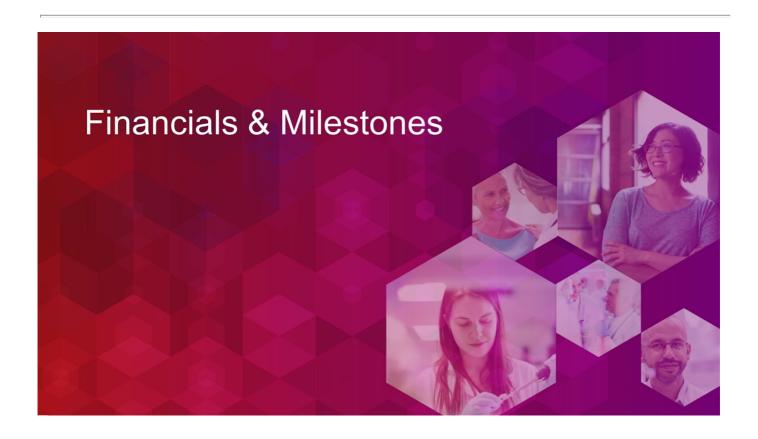


80 (%) 40

Ph Ib SAD in CKD5 patients\*\* Mean Iron Concentrations 60 50 um Iron [µM] 40 30 144







## Financial Highlights – As of September 30, 2017

Cash & Cash Equivalents	\$89.9M
Debt	\$0.0M
YTD Operating Expenditure (as of 9/30)	\$29.1
Common Shares Outstanding	44.4M



## 2017 Expected Milestones



#### **Immuno-Oncology**

Cornerstone Servier alliance incl. PRS-332 and full US rights

PRS 343 IND accepted

Progress several preclinical-stage, highly differentiated multispecifics



#### Respiratory

Cornerstone AstraZeneca alliance incl. PRS-060 and co-marketing

PRS-060 first subject dosing 4Q17

Initiate program on additional target within AZ alliance



#### **Anemia**

Regional partnership in Japan with ASKA

✓ Disclose Phase Ib results

Enroll Phase IIa patients and initiate ROW partnering activities



## Management and Board

#### **Executive Management Team**



Stephen Yoder, J.D.

President & CEO

morphosus



SVP, Chief Development Officer

ALEXION CGI Pharmaceuticals



Allan Reine, M.D.

SVP, Chief Financial Officer





Claude Knopf SVP, Chief Business Officer



#### **Board of Directors**

Stephen Yoder

President & CEO

Chau Khuong (Chairman) Partner, OrbiMed Advisors Michael Richman

CEO, NextCure, Inc. Amplimune, Chiron, MedImmune, Macrogenics

Steven Prelack

SVP, COO, VetCor Velquest Corp., Galectin Therapeutics, BioVex Group Jean-Pierre Bizzari, M.D.

Director Celgene, Servier, Rhone-Poulenc, Sanofi-Aventis

Julian Adams, Ph.D.

CSO & President Clal BioTech Industries, Ltd., Infinity, Millennium Pharm., LeukoSite Inc. Christopher Kiritsy

CEO Arisaph Pharmaceuticals Kos Pharmaceuticals

James Geraghty

Director Third Rock Ventures, Sanofi, Genzyme, Bain and Company



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