## 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 5, 2015

### PIERIS PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in its Charter)

Nevada (State of Incorporation)

333-190728 (Commission File Number) EIN 30-0784346 (IRS Employer Identification No.)

Lise-Meitner-Strasse 30 85354 Freising-Weihenstephan, Germany (Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: +49 81 6114 11400

	<del></del> -			
Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any 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))			

#### Item 7.01 Regulation FD Disclosure.

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

The information set forth under this "Item 7.01. Regulation FD Disclosure," including the exhibit 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 Corporate Presentation of Pieris Pharmaceuticals, Inc. dated November 5, 2015.

#### **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 5, 2015 PIERIS PHARMACEUTICALS, INC.

By: /s/ Darlene Deptula-Hicks

Name: Darlene Deptula-Hicks
Title: Chief Financial Officer

### EXHIBIT INDEX

Exhibit

No. Description

99.1 Corporate Presentation of Pieris Pharmaceuticals, dated November 5, 2015.



# Pieris Pharmaceuticals, Inc. Nasdaq:PIRS

**Corporate Presentation** 

November 2015

### **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 preliminary prospectus filed with the SEC on June 17, 2015. 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 forward-looking 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 Pharmaceuticals Corporate Profile

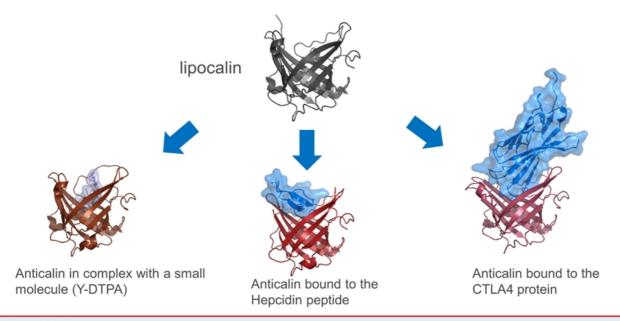


- We are a clinical-stage biotechnology company developing
   Anticalin®-based therapeutic proteins
  - We target validated disease pathways in a unique and transformative way
- Proprietary to us, Anticalins are a novel class of drugs validated in the clinic and by partnerships with leading pharmaceutical companies.
- Our pipeline includes three fully proprietary Anticalin-based programs
  - First-in-class immuno-oncology bispecific tailored for the tumor microenvironment
  - First-in-class inhaled Anticalin to treat uncontrolled asthma
  - Best-in-class half-life-optimized Anticalin to treat anemia
- We are headquartered in Boston, MA, and have operations in the US and Germany.

# **Anticalins are a Novel Class of Therapeutic Proteins**



- Anticalins® are derived from lipocalins human extracellular binding proteins
  - Small and simple make-up
  - Individual derivatives can be generated that bind to a broad range of targets



# **Anticalins Share Several Features with mAbs yet are Highly Differentiated**



- Monoclonal Antibodies (mAbs) are highly successful drugs
- Anticalins share many of the beneficial properties of mAbs yet are highly differentiated

Differentiating Features	Antibody	Anticalin
Human-derived	$\sqrt{}$	$\checkmark$
Natural binding molecule	$\checkmark$	$\sqrt{}$
Non-immunogenic	$\checkmark$	V
High affinity and specificity	$\checkmark$	1
Systemic delivery	√	$\sqrt{}$
Tunable pharmacokinetics		<b>V</b>
Local delivery (e.g., inhalation)		<b>V</b>
Versatile bispecifics & multispecifics		√
Protein class exclusivity		<b>√</b>
Positive freedom to operate landscape		1
Safety Related Efficacy Related	IF	P Related

### **Validation of Technology Platform**





## **Proprietary Next-generation Therapeutic Proteins With Several Degrees of Validation**

- Human data demonstrating desired drug-like properties
  - 26 solid tumor patients with VEGF-A antagonist
  - 36 healthy volunteers with hepcidin antagonist
- Several R&D partnerships generating ~\$44 M in revenue
  - Potential for future milestone and royalties
  - Retained commercial rights in major markets













 OrbiMed Advisors (~19%), Tekla Capital Management (~10%), Lombard Odier (~6.5%); Ally Bridge Group, Auriga, Emerald Mutual Fund, Forbion, Gilde, GLSV, Novo Nordisk, Sphera Funds, Zydus

# **Management and Operations Trans-Atlantic Synergies**





#### © Lufthansa

### Munich

- Proven team in place
- Great drug discovery and protein engineering expertise ~33 FTEs

#### **Boston**

- Corporate HQ September 2015 CEO, CFO, CDO
- Becoming translational pharmacology and drug development hub

## **Anticalin Product Pipeline**

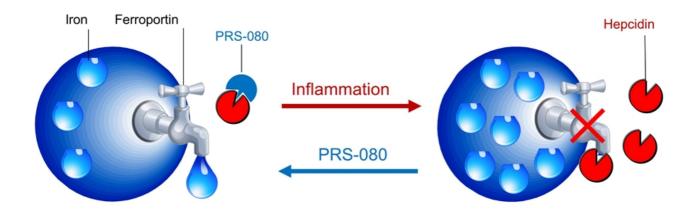


	Product	Target(s)	Indication	Partner	Discovery	Preclinical	Phase 1	Phase 2
Validated	PRS-080	Hepcidin	Anemia	-pieris-	PEGylated Anticalin			
Targets	PRS-060	IL4Ra	Asthma	-pieris-	inhalable An	ticalin		
2. IO multi-	PRS-343	CD137/HER2	Immuno-	-pieris-	mAb-Anticalin fo	usion		
specifics	PRS-300s	n.d.	Oncology	-pieris-	bi-/multispecific	9		
	PRS-110	cMet	Oncology	Zydus				
	PRS-NN	n.d.	n.d.	Zydus			Retained	commercial
3. Partnered	PRS-NN	n.d.	Ophthal-	Stelis				maj. mkts
Programs	PRS-NN	n.d.	mology	Stelis				
	Daiichi	n.d.	n.d.	Dalichi-Sankyo				
	Sankyo	n.d.	n.d.	Dalichi-Sankyo				estones & oyalties
	Sanofi	n.d.	n.d.	SANOFI				

n.d. = not disclosed

## PRS-080: Best-in-Class Drug Candidate For Functional Iron Deficient Anemia



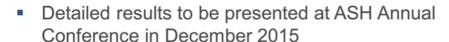


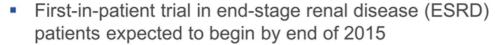
- Hepcidin is a clinically validated anemia target
- PRS-080 designed to reverse hepcidin-mediated anemia by mobilizing iron trapped in the body's iron storage cells
- Addresses patients unresponsive to ESA and iron therapies
- PK profile (half-life) of PRS-080 designed for a best-in-class approach

## PRS-080: Successfully Completed Ph I and Advancing Into Patients



- Ph I study highlights
  - Safe and well tolerated in 48 healthy volunteers across six dose levels (0.08 to 16.0 mg/kg, i.v.), with no reported severe adverse events (SAE)
  - Confirmation of desired 3-day half-life, as predicted from animal studies
  - Confirmation of mode of action: a marked decrease in plasma hepcidin within one hour, followed by elevation of serum iron concentration and transferrin saturation
    - Duration of serum iron elevation and transferrin saturation increased in a dose-dependent manner

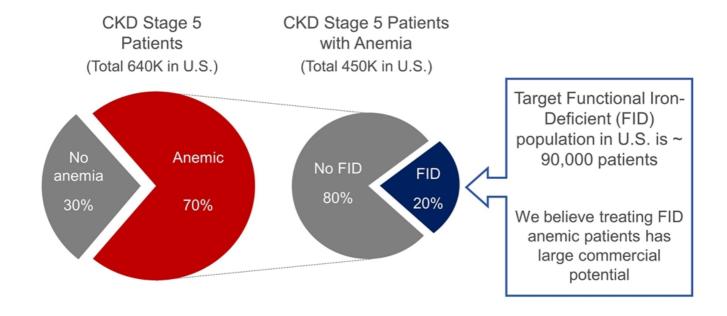






# PRS-080: US Market Opportunity in Chronic Kidney Disease (Stage 5)



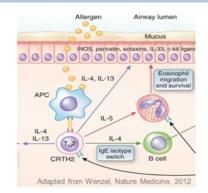


Sources

USRDS 2014 Annual Data Report (2012 numbers): Atlas of Chronic Kidney Disease and End-Stage Renal Disease in the U.S Competitive Landscape Report, Tech Atlas Group, September 2013; Artisan Healthcare Consulting market research study 2013

# PRS-060: First-in-Class Inhaled Biologic Targeting IL4Ra





### Strong target validation & biomarker availability

- ✓ IL4Ra mAb (dupilumab) with strong efficacy in Phase 2b
- ✓ Biomarker-based patient selection is straight-forward
- ✓ Validated biomarkers (e.g. FeNo) allow for early clin. read-out

### Clear differentiation from injected mAbs

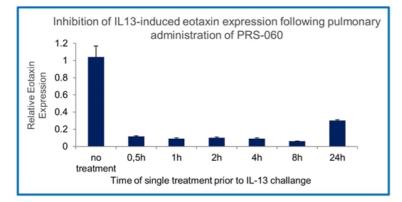
- PRS-060 optimized for reduced on-target, off-tissue targeting
  - ✓ PRS-060 is administered directly to the lung and has a short half-life (several hours predicted in man, leading to predicted low systemic exposure)
  - ✓ In contrast, ~1% of systemically administered mAb has been shown to reach the lung compartment, leading to high systemic exposure\*



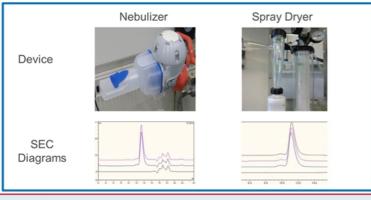
- ✓ More convenient: standard of care is inhaled ICS/LABA
- ✓ Predicted Lower COGS may enable reach to broader patient populations, where pharmaco-economic burden is not as pronounced \*(Hart et al. (2001) JACI. 108:250)

## PRS-060: Pulmonary Delivery Effective in vivo & Feasible Formulation





Early onset of inhibition and durability of effect up to 24h post pulmonary administration

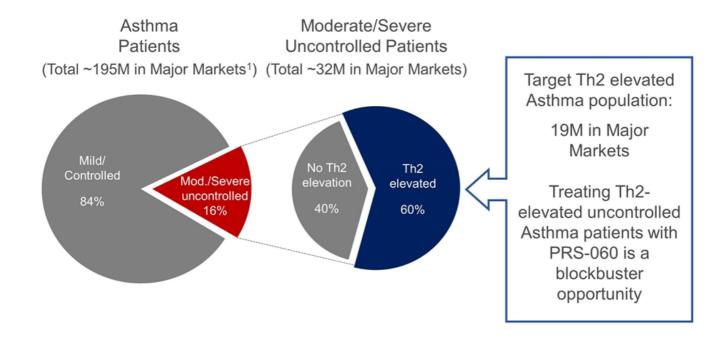


Nebulization and spray drying feasibility demonstrated

- ✓ Appropriate particle size
- √ No aggregation
- ✓ Full functional activity
- ✓ High yield

## **PRS-060: Market Opportunity in Asthma**





<sup>&</sup>lt;sup>1</sup> Major Markets: U.S., EU, Japan, Brazil, Russia, India, China

Source

Artisan Healthcare Consulting market research study

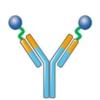
### PRS-343: HER2-CD137 Bispecifics

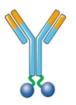
### **Multiple Formats Under Preclinical Evaluation**

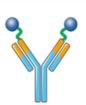


PRS-343: HER2-CD137 Bispecifics











CD137targeting Anticalin



HER2targeting mAb (Trastuzumab derived)

### CD137 - a TNFR Costimulatory Target

- Preclinically and clinically validated
  - Marker for tumor-reactive T cells
  - Activation leads to tumor elimination in vivo
  - Signaling included in clinical CAR-T cells
- mAbs struggle to find therapeutic window
  - Activity depends on Fc receptor interaction
  - Doses required for T cell activation have led to toxicity
  - Current approaches focus on NK activation

### HER 2 - Validated but not fully exploited

- Upregulated on several solid tumors with significant unmet medical need
- Restricted expression on normal tissue favors immunotherapy approach
- Bispecific immunotherapy approach may expand responding population
  - HER2+ tumors with lower expression levels not adequately addressed with current therapy

## CD137-Targeting Lead Anticalin<sup>®</sup> Has Demonstrated Agonistic Properties



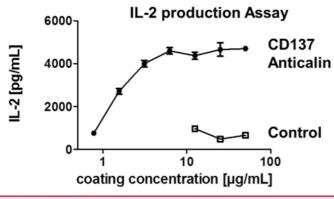
### **Binding to CD137**

- Affinity:  $KD_{hCD137} = 2nM$
- "Non-competitive" CD137 engagement preserves ligand-binding capability to CD137L

#### **Biophysical properties**

- 100% monomeric expression
- TM = 74°C (DSC)
- Fully stable after 1 week at 37°C in PBS, hu or mu plasma

### In vitro functional testing

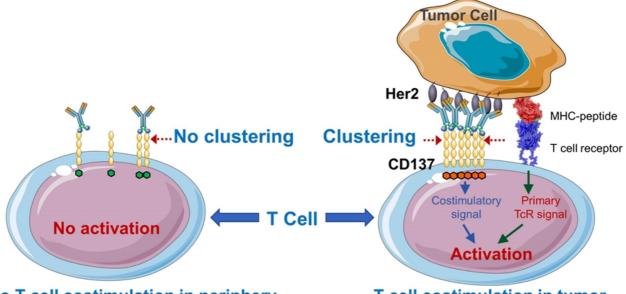


# Dose-dependent T-cell activation in ex vivo human donor cell assay by CD137 cross linking

 CD137-specific Anticalin coated together with subthreshold concentration of aCD3 antibody on ELISA plate

### PRS-343: First-in-Class Bispecific for Tumor-localized Activation of T cells





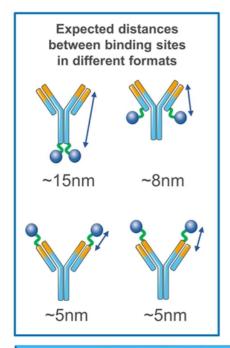
No T cell costimulation in periphery

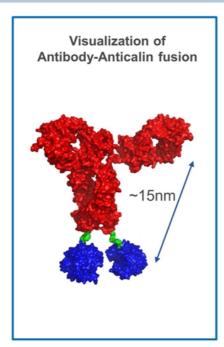
T cell costimulation in tumor

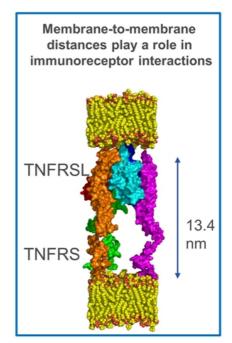
- CD137 is activated via clustering (trimerization)
- HER2-mediated clustering of bispecific drives CD137-mediated T cell activation
- Activating via a co-stimulatory signal (instead of a primary signal) is expected to maintain tumor antigen specificity by T cell receptor

# **Bispecific Geometry Impacts Immune Synapse**







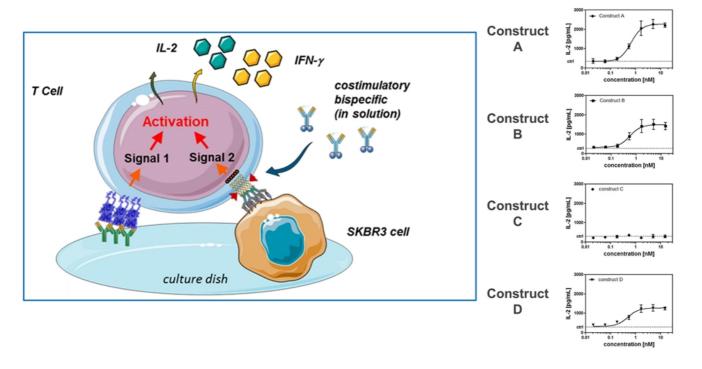


- Straightforward access to a range of distances between target binding sites
- Several formats to interrogate optimal target synapse for tumor cell killing

# PRS-343 Bispecific Geometry Impacts T Cell Activation



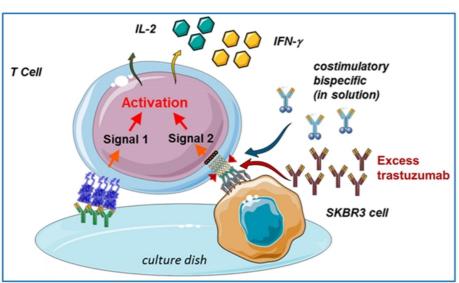




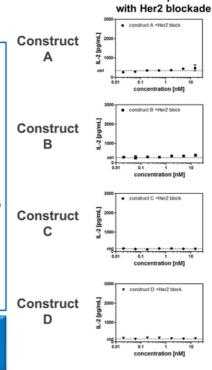
# PRS-343 T Cell Activation is HER2 Target-Dependent



IL-2 response



 Addition of excess HER2-targeting trastuzumab prevents PRS-343 binding to HER2-positive cells and results in a loss of activity, as intended, confirming mode of action



### From Idea to Drug Candidate -**Efficient Platformed Process**

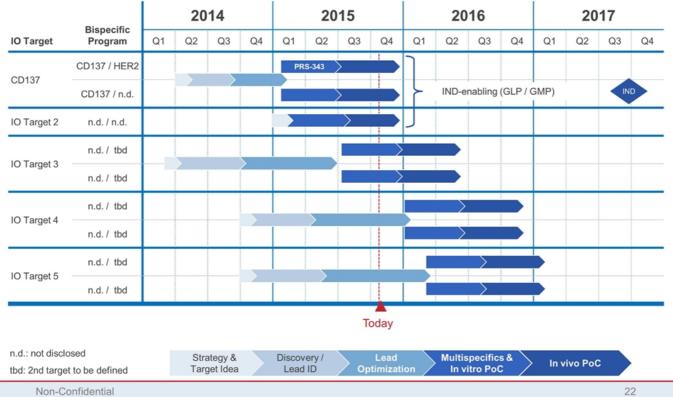


12 - 18 months

Multispecific Drug Drug Idea Leads Candidates Candidates Cell Target 1 Target 2 Target (combination) Library screening Lead optimization Generation and characterization of rationale Assay set up Drug Candidate multipecific Drug Target product profile characterization Lead characterization Candidates Construct design Lead & backups - Pharmacological Multiple constructs Research plan - Biophysical In vitro PoC

### **Pieris IO Pipeline Progressing Multiple Options & Partnering Opportunities**





## Anticalin Intellectual Property – Safe & Sound



### **Broad Patent Portfolio**

- Drug class protected through 2020s
- Controlled patent filings and prior art enable broad follow-on protection
- Unique IP for each program

### **Freedom to Operate**

No third party IP identified to date for FTO on platform or therapeutic programs

Program (Target)	CoM Patent Term
080 Hepcidin	2031
060 IL4Ra	2031
343 HER2/CD137	2036

## Financial Highlights & Capitalization



Cash & Cash Equivalents*	\$34.3M
Total Debt	\$ 0.0M
Revenue Since Inception **	~ \$44.0M
Grant Revenue Since Inception	\$14.1M
H1 2015 Cash Burn (includes \$1.2M in debt repayment)	\$ 8.4M
Market Cap – at November 3, 2015	\$ 76.7M
52 Week Range	\$1.54 - \$3.70
Common Shares Outstanding*	39,732,258

At July 31, 2015

<sup>\*\*</sup> Includes Revenue from Licensing, Collaborations & R&D Services

## **Potential Future Milestones**



First patient data for for PRS-080 (anemia)
Additional Collaborations
Initiation of first-in-patient study for PRS/080 (anemia)
Initiation of clinical development for first partnered program
Continued milestone income from existing partnered programs
Positive preclinical data for PRS-343 bispecifics (IO)
Positive Phase I data for PRS-080 (anemia)
November 2015 through 2016





### Pieris Pharmaceuticals, Inc.

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