

scPharmaceuticals

**Jefferies 2019 Healthcare Conference  
June 7, 2019**

# Disclaimer

This presentation may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, our launch and commercialization plans, our clinical results and other future conditions. All statements other than statements of historical facts contained in this presentation, including statements regarding future results of operations and financial position, business strategy, current and prospective product candidates, planned clinical trials and preclinical activities, product approvals, the advancement of and potential timing of regulatory filings for FUROSCIX with the West Pharmaceuticals SmartDose drug delivery system, plans with respect to the Type C Meeting with the FDA to discuss the regulatory path for FUROSCIX research and development costs, current and prospective collaborations, timing and likelihood of success, expectations regarding market acceptance and size, plans for launch and commercialization, plans and objectives of management for future operations, and future results of anticipated product candidates, are forward-looking statements. All such forward-looking statements are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the factors discussed in the "Risk Factors" section in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2018, as well as other risks detailed in the Company's subsequent filings with the Securities and Exchange Commission. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. Accordingly, readers are cautioned not to place undue reliance on these forward-looking statements. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

Certain information contained in this presentation relates to or is based on studies, publications, surveys and other data obtained from third-party sources and the Company's own internal estimates and research. While the Company believes these third-party sources to be reliable as of the date of this presentation, it has not independently verified, and makes no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, all of the market data included in this presentation involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while we believe our own internal research is reliable, such research has not been verified by any independent source.

# About scPharmaceuticals

## Advancing patient care and reducing healthcare costs through innovative subcutaneous delivery

- Leveraging approved drugs with well-known efficacy and safety profiles through subcutaneous delivery of hospital-based/in-patient IV drugs
- Two late-stage programs in large markets utilizing 505(b)(2) pathway
  - Heart failure (HF)
    - FUROSCIX® NDA expected 2020
  - Broad spectrum antibiotics
    - Ceftriaxone NDA expected 2021
- High barriers to competitive entry
  - Patent coverage of drug formulation and methods of treatment until 2034
- Ended 1Q19 with cash of \$83M; 2019 quarterly burn of \$8-10M

# Large unmet need in heart failure

## Lead program targets heart failure – a large global market opportunity with a clear value proposition

Prevalence of HF is 6.5 million adults in the US<sup>1</sup>

- 10.5 million adults in the G7<sup>2</sup>
- In the US ~3.7 million HF events occur annually<sup>1,3</sup>
  - Congestion is the most common reason for hospitalization and patients seeking medical care<sup>4</sup>
- \$8B total addressable market opportunity in the US
- HF patients represent 33% (\$123B) of annual Medicare Part A and B spending<sup>5</sup>
- Potential for significant cost reductions for payers and hospitals by reducing patient hospital admission/readmission rates

1. Circulation 2018, Benjamin 2. Decision Resources 2014 Cardium report, note: G7=US, Germany, France, UK, Italy, Spain, Japan 3. Data on file; calculation from market research 4. Mullens W, et al. *Eur J Heart Fail.* 2019 Feb;21(2):137-155. 5. Cost Burden of Worsening Heart Failure in the Medicare fee for service population, Milliman, 2017

**sc**Pharmaceuticals

**A New Model of Treating Heart Failure – FUROSCIX®**

# FUROSCIX – a drug-device combination product

- Drug: scFurosemide
  - Proprietary formulation of furosemide
    - Furosemide is the most widely used oral and parenteral diuretic in treatment of edema associated with congestive heart failure
    - Physiologic pH formulation
    - Pre-filled, Crystal Zenith® cartridge
- Device: On-Body Infusor
  - SmartDose® Gen II 10 mL on-body delivery system
  - Developed to deliver fixed dose of 80mg of scFurosemide subcutaneously through a pre-programmed, biphasic delivery profile with 30 mg administered over the first hour, followed by 12.5 mg/hour for the subsequent 4 hours

# New FUROSCIX delivery system incorporates an easy-to-use On-Body Infusor

Incorporates West Pharmaceutical Services, Inc.'s ("West") SmartDose platform technology

This platform technology has been previously approved by FDA and EMEA as part of a combination product

- Fully integrated delivery system
  - Container - Elastomer - Device
- Pre-filled cartridge
- Visual, tactile, and audible feedback
- Electromechanical drive
  - Delivery volume up to 10mL
- Pre-programmable injection time
- Patient-centric design
- **Wireless connectivity**



SmartDose® and the external product configuration of West's SmartDose® drug delivery platform are the intellectual property of West Pharmaceutical Services, Inc. or one of its subsidiaries, in the United States and other countries.

# FUROSCIX – Path forward for resubmission

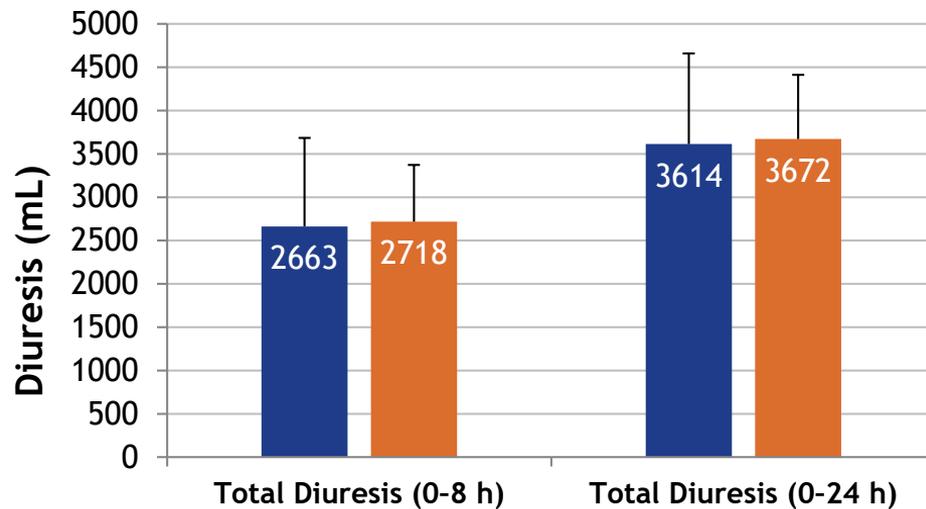
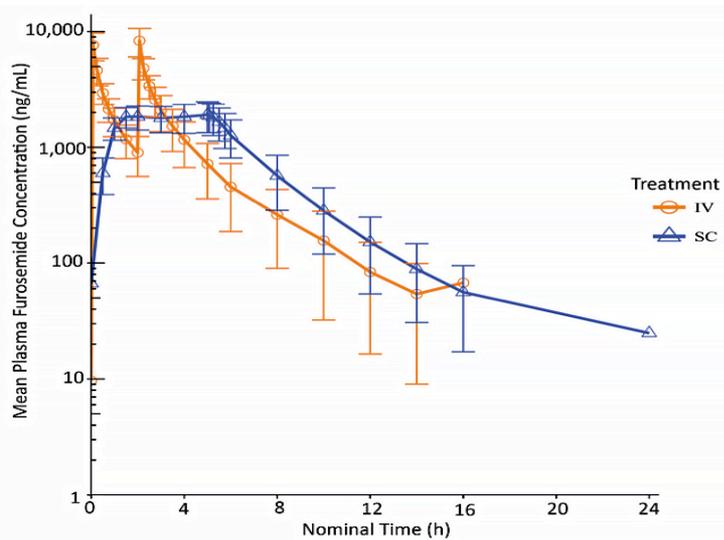
## Collaboration with West Pharmaceutical Services to develop a next-generation FUROSCIX

- Completed preliminary feasibility studies with SmartDose drug delivery system
  - Drug stability in pre-filled cartridge
  - Drug compatibility
  - Overall performance within FUROSCIX delivery specifications
- Type C Meeting with the U.S. Food and Drug Administration (FDA) to be held in June 2019
  - Finalize FUROSCIX NDA resubmission plan
  - Device features are expected to address FDA concerns around dose validation
- Anticipate refiling of FUROSCIX NDA in 2020

SmartDose® and the external product configuration of West's SmartDose® drug delivery platform are the intellectual property of West Pharmaceutical Services, Inc. or one of its subsidiaries, in the United States and other countries.

# Pivotal study demonstrated drug exposures and diuresis comparable to IV furosemide

- Administered via B-Braun pump
- Subcutaneous: 80 mg over 5 hours
- Intravenous: 40 mg x 2 doses over 2 hours



Sica, D. A., de Boer, R. A., & Pitt, B. (2018). Subcutaneous Furosemide in Heart Failure: Pharmacokinetic Characteristics of a Newly Buffered Solution. *JACC Basic Transl Sci.* doi:10.1016/j.jacbsts.2017.10.001

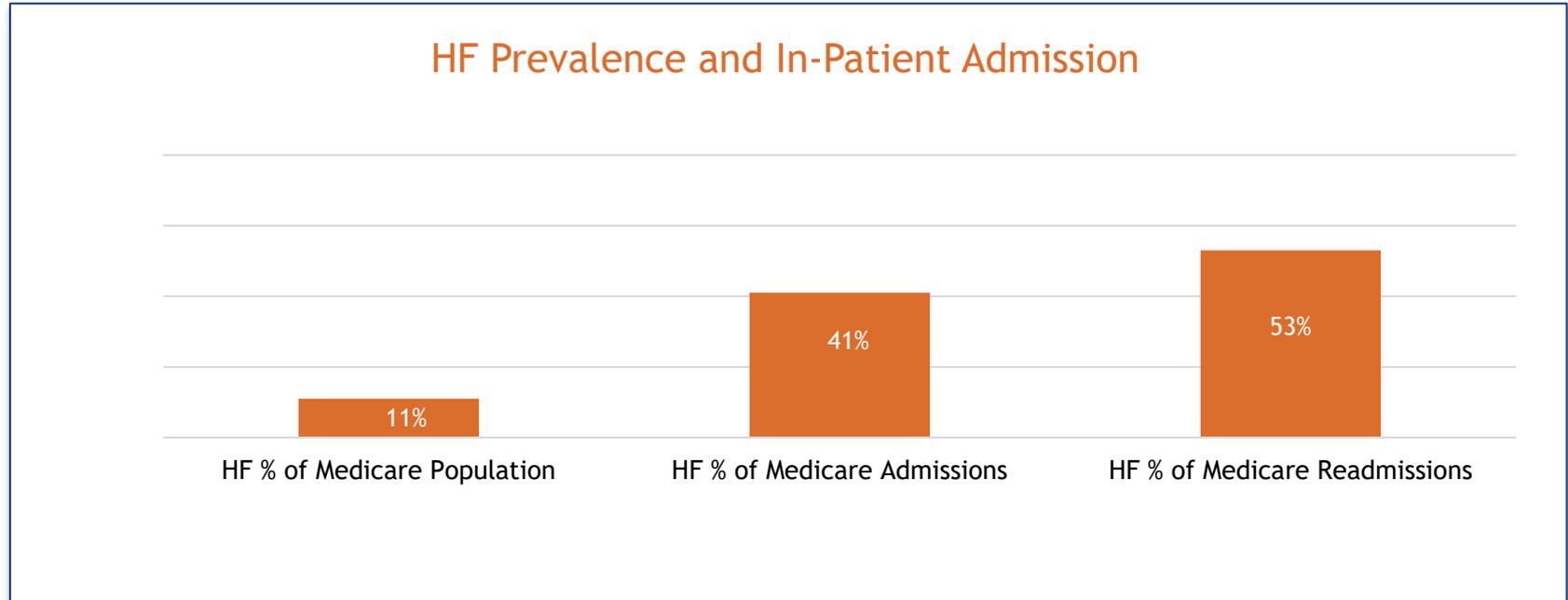
## FUROSCIX Value Proposition

# Cycle of decompensation and hospitalization is the primary burden for patients suffering from HF



1. HCUP National Inpatient Sample (NIS), 2014, Agency for Healthcare Research and Quality (AHRQ) based on ICD-9 codes  
2. scPharmaceuticals data on file: Decision Resources HF landscape and Forecast December 2016

# Heart failure patients present a significant burden to Medicare



59% of admissions directly attributed to volume overload<sup>1</sup>

1. Bennett S, et al. American Journal of Crit Care. 1998;7(3):168-174\*

# Stakeholders are aligned on the need to reduce the number of HF hospitalizations and treatment costs



## Payer

- Average cost to Medicare for a HF admission is \$11,840<sup>1</sup>
- HF is top condition targeted by CMS readmission reduction initiative<sup>2</sup>
- HF will be moving to Medicare Quality Payment Program in 2019<sup>3</sup>



## Hospital and HCP

- Average length of stay is 5.2<sup>4</sup> days with DRG only reimbursing 3.9 days<sup>5</sup>
- Increased financial exposure for providers based on readmission penalty risk
- HF in-patient care represents multi-million dollar loss for targeted hospitals

1. Fitch K, et al (2017) The cost burden of worsening heart failure in the Medicare fee for service population: an actuarial analysis [white paper]

2. Readmission Reduction Program (HRRP) (updated 2018, April 27) Retrieved from <https://www.cms.gov/medicare/medicare-fee-for-service-payment/acuteinpatientpps/readmissions-reduction-program.html>

3. Quality Payment Program from CMS <https://qpp.cms.gov/>

4. Agency for Healthcare Research and Quality (AHRQ). HCUP National Inpatient Sample (NIS), 2014

5. scPharmaceuticals. Data on File. CMS. 2014 data based on DRGs, Table 5: List of MS-DRGs, relative weighting factors and geometric and arithmetic mean length of stay

# Target patient is well identified and represents a large outpatient opportunity

## 1. Hospital-based Events—3M<sup>1</sup>

Hospitalization

IV furosemide

 **FUROSCIX**<sup>®</sup>  
(furosemide injection)



**Go Home**  
Avoid readmission

## 2. Clinic-based Events—700K<sup>2,3</sup>

Clinician Intervention

Increase or Change Diuretic

 **FUROSCIX**<sup>®</sup>  
(furosemide injection)



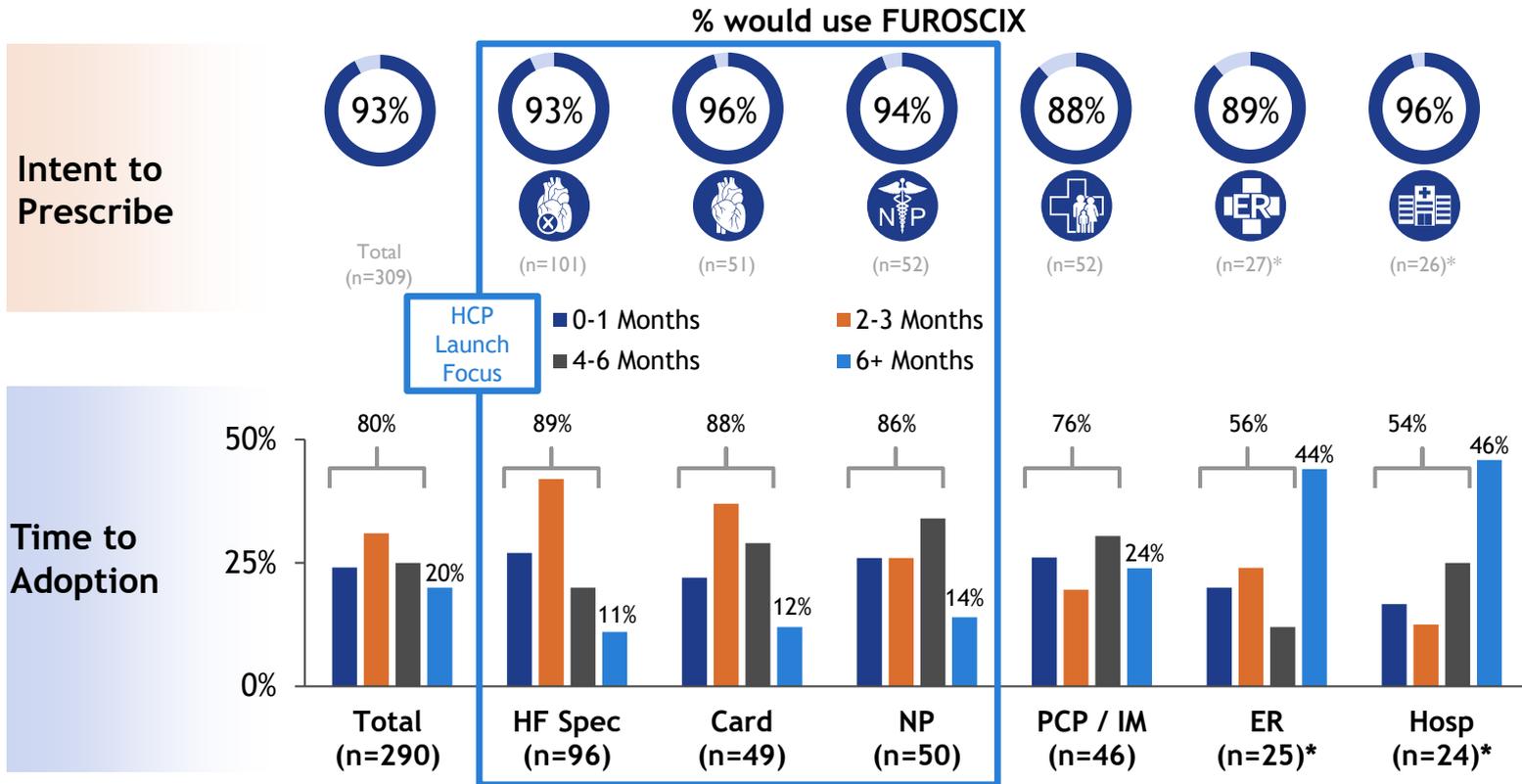
**Stay Home**  
Avoid admission  
Avoid readmission

1. Decision Resources HF landscape and Forecast Dec 2016 adjusted HCUP all listed 2014 number down based on chart abstraction, KOL interviews, and ARIC study

2. Benjamin E, et al. Circulation. 2017;135:e146-e603

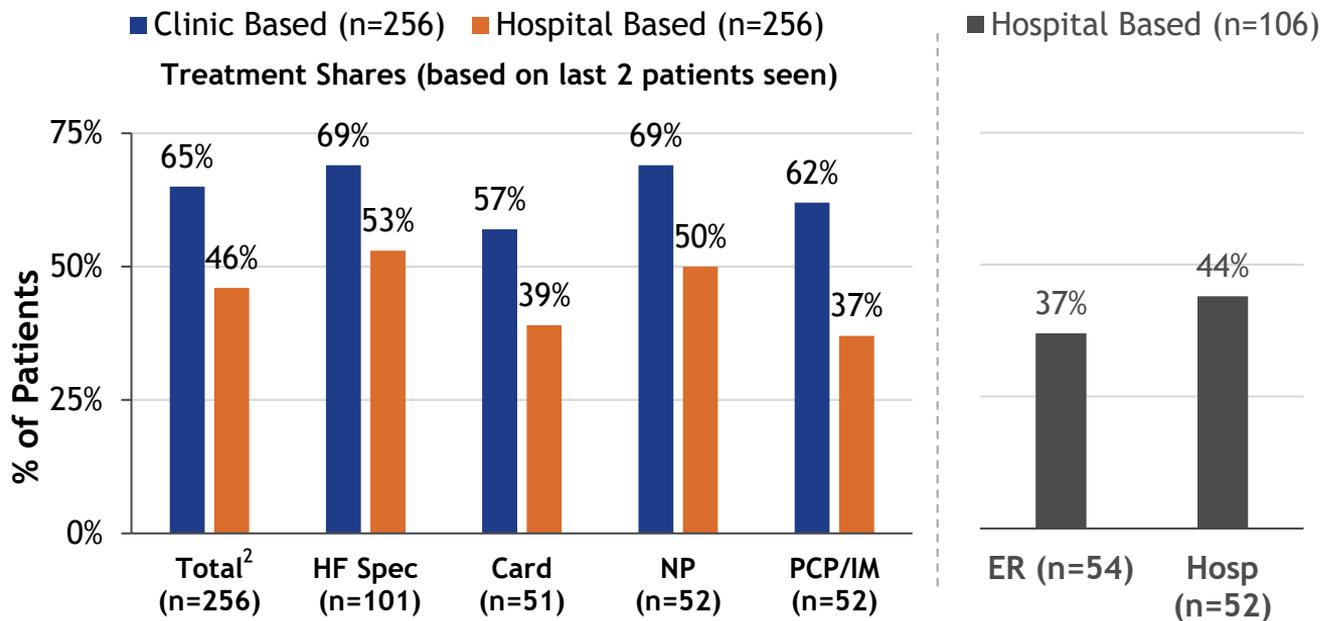
3. Data on file; calculation from market research

# HCPs have a high willingness to prescribe FUROSCIX and a rapid time to adoption



1. scPharmaceuticals data on file: Reason Research quantitative study (n=309 HCPs)

# FUROSCIX HCP research—treatment share<sup>1</sup>

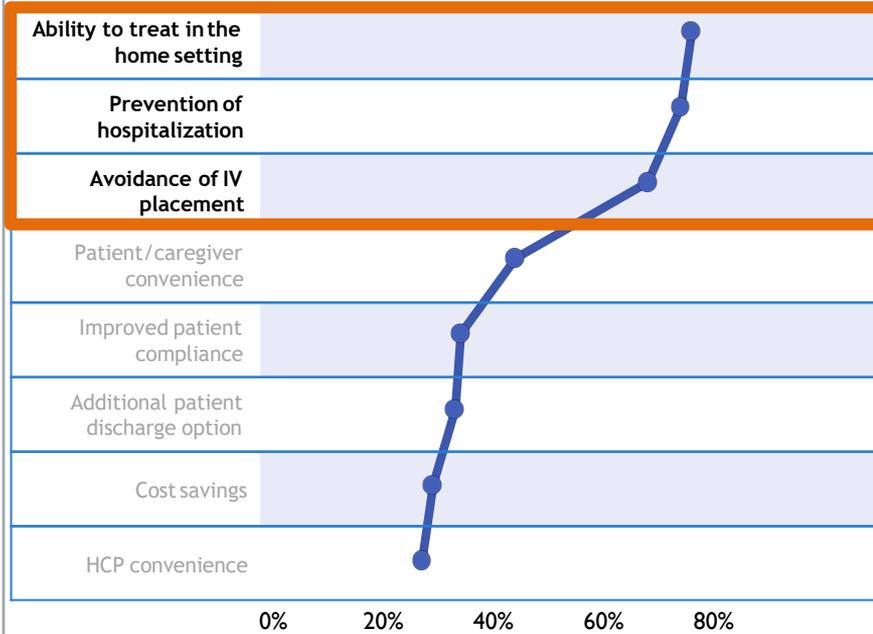


1. scPharmaceuticals data on file: Reason Research quantitative study (n=309 HCPs)

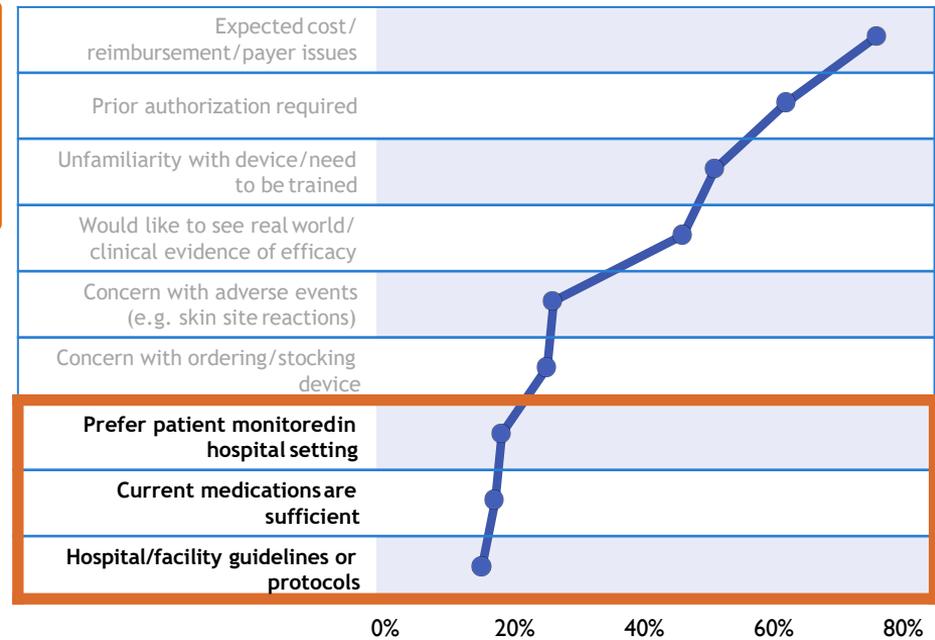
2. Total = HF Spec, Card, NP and PCP/IM patients; No ER or Hospitalist/ER and Hospitalists were only asked about their last 2 patients, while HF Spec, Cards, NPs, and PCP/IM were asked for their last pre-acute and last post-acute patient/Q71. Assume Product X were available (without insurance coverage issues) for long enough for you to begin prescribing. If you were to treat adult patients with fluid overload with the same characteristics as your last Pre-Acute Patient and your last Post-Acute Patient/Patient 1 and Patient 2, would you change your previous treatment choice to Product X?

# HCPs clearly identify advantages of FUROSCIX and believe it has the ability to improve HF treatment

## What are the advantages of FUROSCIX®?



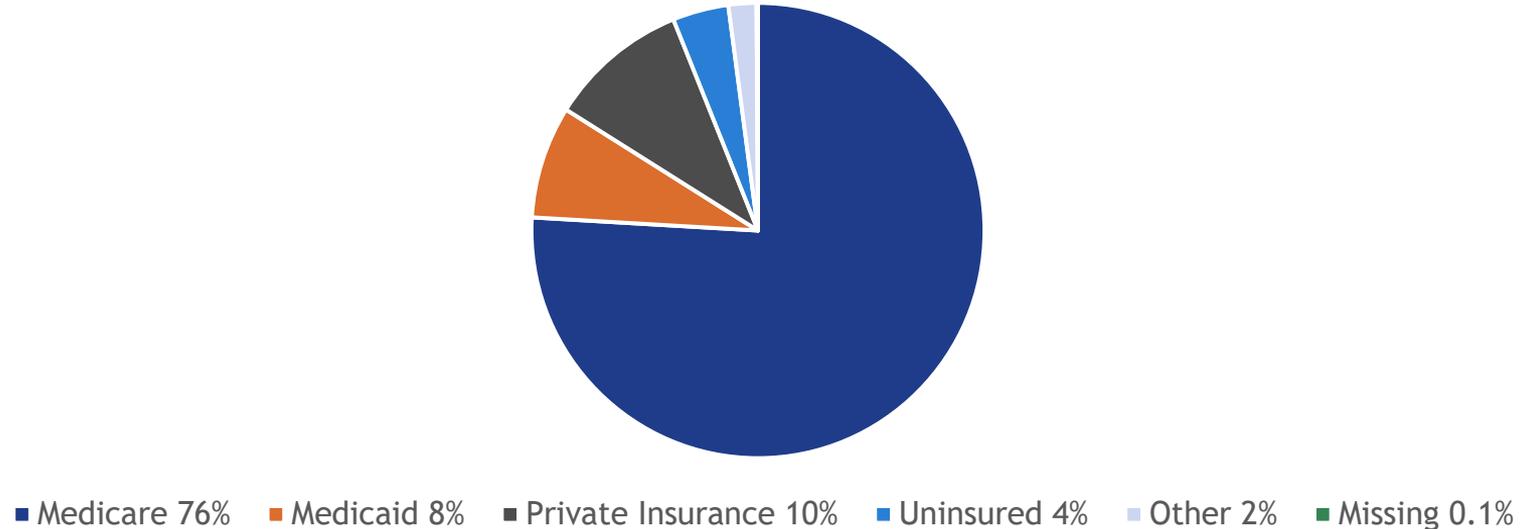
## What are the barriers to adopting FUROSCIX®?



Reason Research Quantitative study (n=309 HCPs)

# FUROSCIX provides a clear value proposition to payers

Payer Mix for Heart Failure Patients (2013)<sup>1</sup>



**FUROSCIX Value: Reduction in PMPM costs when FUROSCIX is utilized**

1. HCUP National Inpatient Sample (NIS), 2013, Agency for Healthcare Research and Quality (AHRQ)

# FUROSCIX life cycle management and development planning

- Enhancing FUROSCIX to continually improve the patient experience
  - Prefilled cartridge with West
  - Potential with device and drug development to shorten infusion time
  - Potential with higher concentration to create future dose flexibility
- Increasing barriers to entry
  - Patent application for concentrated furosemide formulation could extend protection through 2040

80 mg  
10 mL  
5-hour Infusion

80 mg  
10 mL  
Shortened ( $\leq 2$  hrs) Infusion

Higher Concentration  
80 - 160 mg Injection  
Fixed Dose

SmartDose® and the external product configuration of West's SmartDose® drug delivery platform are the intellectual property of West Pharmaceutical Services, Inc. or one of its subsidiaries, in the United States and other countries.

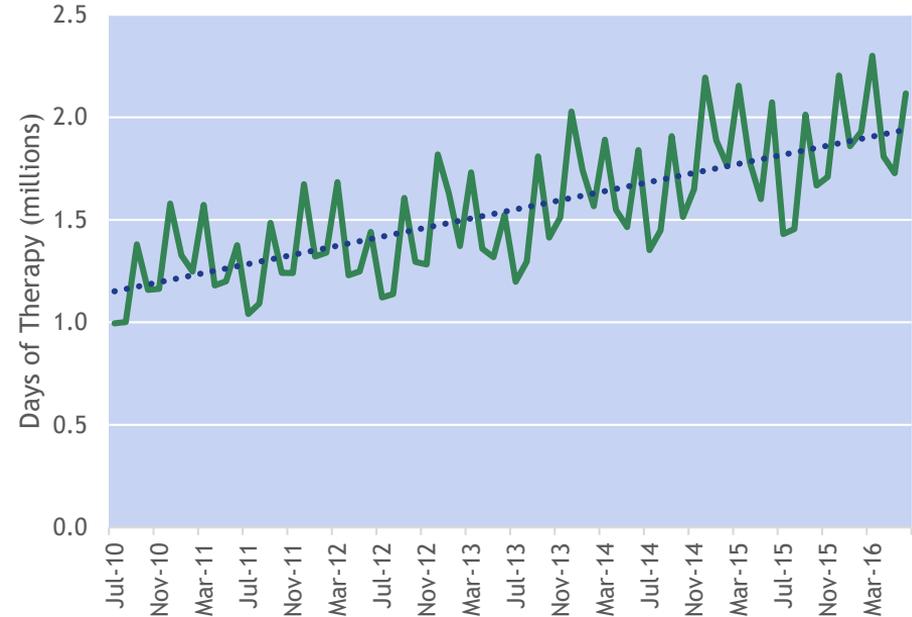
**scPharmaceuticals**

**Anti-infective Program**

# Subcutaneous delivery of ceftriaxone has the potential to transform the outpatient antibiotic market

- ~15 million US ceftriaxone doses<sup>1,2</sup> in outpatient setting projected for 2021
- \$4.5B total addressable market opportunity in the US projected for 2021
- Clear clinical and economic value proposition
  - Eliminate the reliance on intravenous catheters/PICC lines
  - Avoid the need for coordination of home infusion services which often delays discharge
  - Provide patients an alternative to hospitalization or driving to an infusion center daily
  - Alternative to suboptimal oral agents (fluoroquinolones)
- Subcutaneous option benefits multiple stakeholders: patients, hospitals, physicians, payers

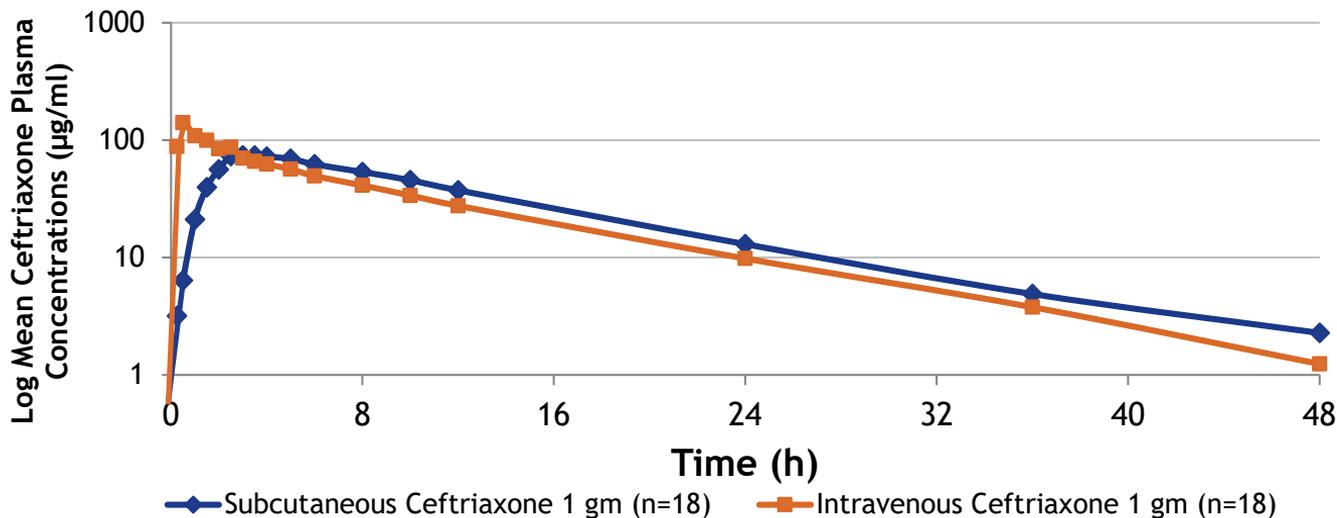
Ceftriaxone Outpatient Days of Therapy



1. IMS Health data (July 2015-June 2016); 2. Decision Resources AMR data 2016

# Pivotal study confirms scCeftriaxone comparable to IV

- Similar drug exposures (AUC 0-∞) between IV ceftriaxone and scCeftriaxone
- Complete bioavailability (107.7%) with subcutaneous administration
- Pharmacodynamic profile (%T>MIC24) of scCeftriaxone is non-inferior to IV infusion



US NDA submission expected 2021

**scPharmaceuticals**

## **Corporate Summary**

# scPharmaceuticals senior management & board of directors

**John H. Tucker**

PRESIDENT AND CHIEF EXECUTIVE OFFICER

**Michael Hassman**

SENIOR VICE PRESIDENT, MANUFACTURING AND TECHNICAL OPERATIONS

**John Mohr, Pharm. D.**

SENIOR VICE PRESIDENT, CLINICAL DEVELOPMENT AND MEDICAL AFFAIRS

**Rachael Nokes**

SENIOR VICE PRESIDENT, FINANCE

## Board of Directors

**Mette Kristine Agger**

Lundbeckfond Ventures

**Minnie Baylor-Henry**

B-Henry & Associates, J&J

**Dorothy Coleman**

EVP & CFO, Excellus BCBS

**Mason Freeman, MD**

MGH & 5AM Ventures

**Fred Hudson**

Former partner, KPMG

**Jack Khattar**

Supernus Pharmaceuticals

**Leonard Schaeffer**

Founding Chairman & CEO, WellPoint

**Klaus Veitinger**

OrbiMed Advisors

**John H. Tucker**

CEO, scPharmaceuticals

# Opportunity summary

- Pipeline includes products with large global market opportunity
  - FUROSCIX represents \$8B addressable US opportunity
  - scCeftriaxone represents \$4.5B addressable US opportunity in 2021
- Clear value proposition
- Established reimbursement model
- 505(b)(2) regulatory pathway
- High barriers to entry
  - Provisional patent of FUROSCIX filed that would extend protection through 2040

**Alignment of patients/caregivers, HCPs and payers in a life science innovation that can transform and reduce cost of care**

scPharmaceuticals

**Thank you**