TURNING PATIENT CARE
INSIDE OUT

Jefferies Virtual Healthcare Conference

June 4, 2020

scPharmaceuticals

Innovative outpatient solutions that bring care closer to home

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 approval, the planned resubmission of the FUROSCIX NDA, including potential timing of, and the Company's expected progress towards, the resubmission, 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, the company's financial position 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 ability of the FUROSCIX Infusor to appropriately deliver therapy, the receipt of regulatory approval for FUROSCIX Infusor or any of our other product candidates or, if approved, the successful commercialization of such products, the risk of cessation or delay of any of the ongoing or planned clinical trials and/or our development of our product candidates, the risk that the results of previously conducted studies will not be repeated or observed in ongoing or future studies involving our product candidates, and the risk that the current COVID-19 pandemic will impact the Company's device validation, drug stability testing, the timing of the FDA's review of the Company's FUROSCIX NDA and other operations. For a discussion of other risks and uncertainties, and other important factors, see the section entitled "Risk Factors" in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019, 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.

We filed a registration statement (including a prospectus) on Form S-3 with the SEC for the offering for which this communication relates. A prospectus supplement is expected to be filed with the SEC in connection with the offering. Before you invest, you should read the prospectus supplement and the accompanying prospectus in that registration statement, the documents that we have filed with the SEC that are incorporated by reference into the registration statement and the other documents that the company has filed with the SEC for more complete information about us and this offering. You may access these documents for free by visiting the SEC website at www.sec.gov. Alternatively, you may obtain a copy of the prospectus supplement and accompanying prospectus, when available, from Jefferies LLC, Attention: Equity Syndicate Prospectus Department, 520 Madison Avenue, 2nd Floor, New York, NY 10022; by telephone at 877-821-7388; or by email at Prospectus_Department@Jefferies.com or from SVB Leerink LLC, Attention: Syndicate Department, One Federal Street, 37th Floor, Boston, MA 02210; by telephone at 800-808-7525, ext. 6132; or by emailing Syndicate@svbleerink.com.

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
  - FUROSCIX® in Heart Failure (HF)
    - NDA resubmission expected mid-2020; anticipate 6-month review
  - scCeftriaxone a potentially novel delivery of a broad spectrum antibiotic
- High barriers to competitive entry
  - Patent coverage of drug formulation and methods of treatment until 2034
- Ended 1Q20 with cash of $75; 2020 annual burn of $36-40M
  - Raised additional ~$50M in May follow-on

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
CFO/SVP, Anthem, Inc.

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

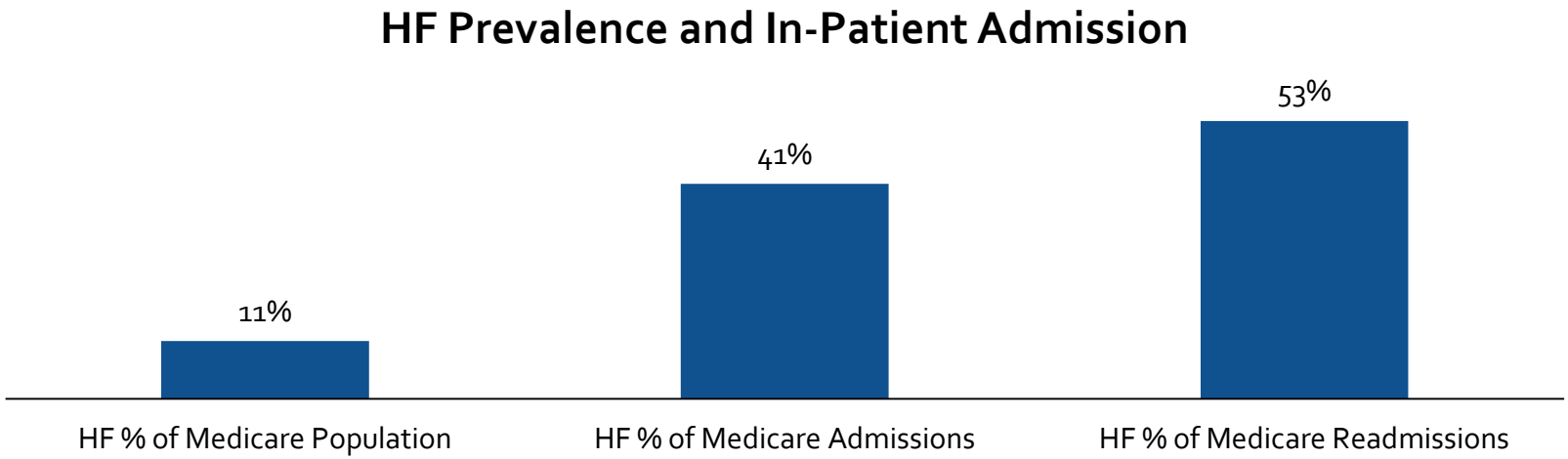
Large unmet need in Heart Failure (HF)

Lead program targets HF — a large global market opportunity with a clear value proposition

- Prevalence of HF is 6.5 million adults in the US[1] and 10.5 million adults in the G7[2]
- In the US ~3.8 million HF events occur annually[1,3]
  - Congestion is the most common reason for hospitalization[4]
- $4.3 B total addressable market opportunity in the US
- HF patients represent 33% ($123B) of annual Medicare Part A and B spending[5]
- Potential for significant cost reductions for payers and hospitals by reducing patient hospital admission/readmission rates

1. Benjamin, et. al. Circulation 2018; 137(12):e67-e492. 2. Decision Resources 2014 Cardium report, note: G7=US, Germany, France, UK, Italy, Spain, Japan 3. Data on file. scPharmaceuticals, Burlington, MA. 4. Mullens W, et al. Eur J Heart Fail 2019; 21(2):137-155. 5. Fitch, et al. Cost Burden of Worsening Heart Failure in the Medicare fee for service population, Milliman, 2017. http://us.milliman.com/insight/2017/The-cost-burden-of-worsening-heart-failure-in-the-Medicare-fee-for-service-population-An-actuarial-analysis/

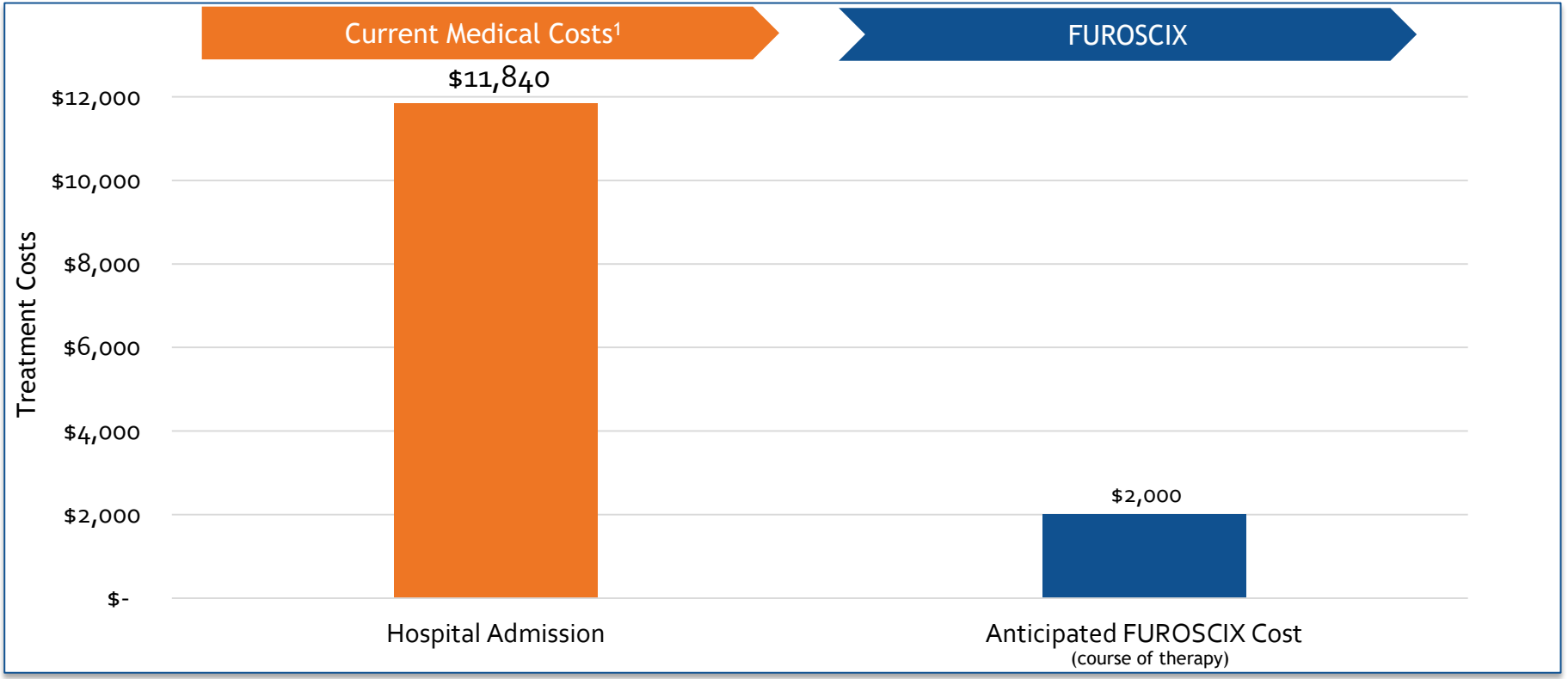
HF patients present a significant burden to Medicare



59% of admissions directly attributed to volume overload[1]

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

Opportunity to decrease medical costs associated with HF hospitalizations



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]

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

Stable patient treated with oral diuretic

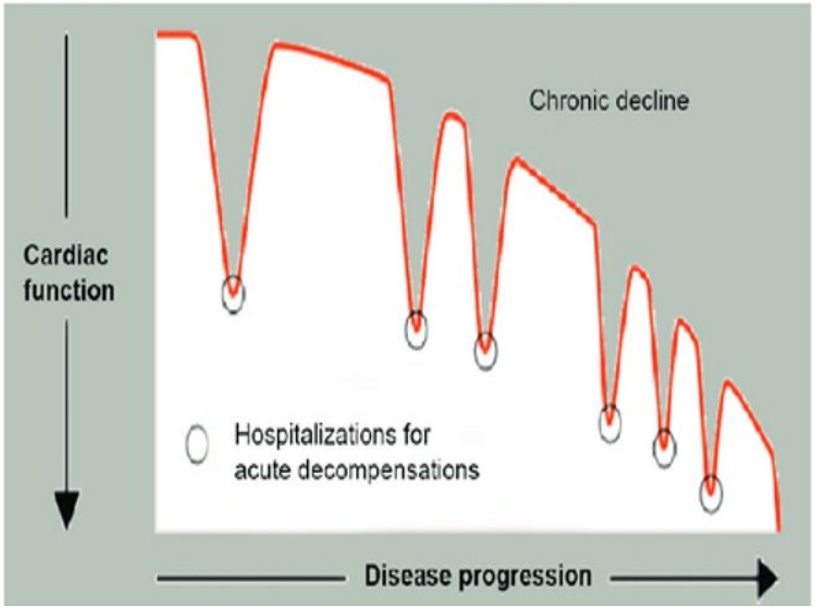
- Start of fluid retention – hallmark of HF
- Worsening fluid status - oral therapies ↓ efficacy
- Decompensation leads to ↓ oral bioavailability

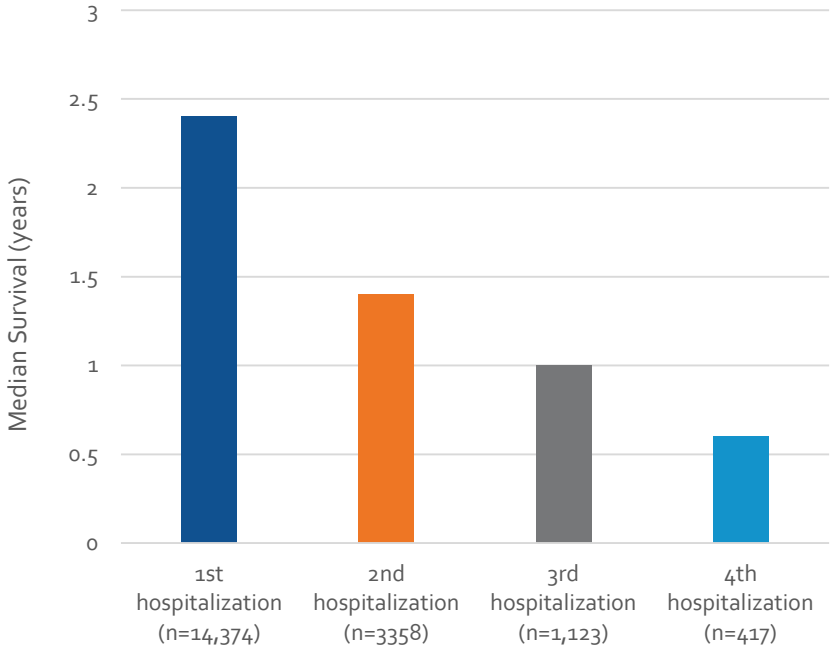
Hospitalized patient treated with IV diuretic

- Average length of stay for HF admission is 5.2 days[1]
- IV furosemide utilized to treat ~90% of HF hospitalizations[2]
- High rate of readmissions 30 – 50% patients discharged wet[3]

1. HCUP National Inpatient Sample (NIS), 2014, Agency for Healthcare Research and Quality (AHRQ) based on ICD-9 codes 2. Data on file. scPharmaceuticals, Burlington, MA. 3. Neuenschwander JF, et al. Crit Care Clin. 2007;23(4):737-58. Costanzo MR, et al. Am Heart J. 2007;154(2):267-77. Fonarow GC, et al. JAMA. 2005;293(5):572-80

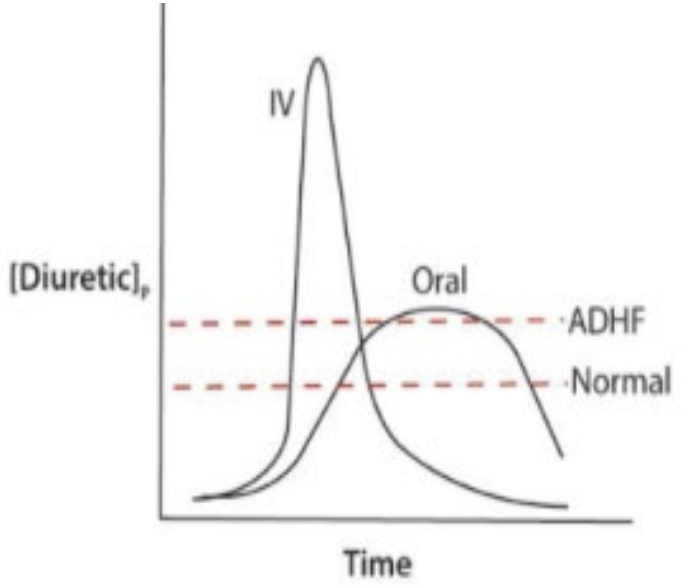
Hospitalization for HF is associated with disease progression and poor outcomes



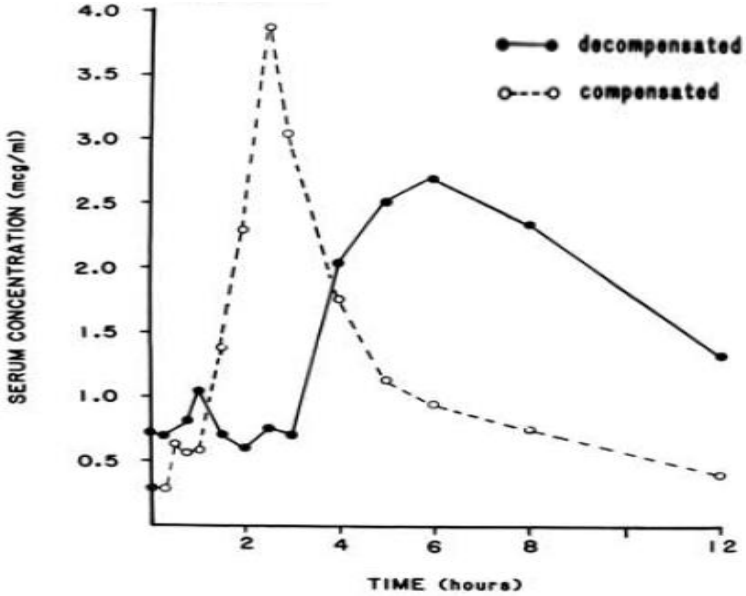


1. Gheorghiade, M., et al. Am J Cardiol 2005; 96(6A): 11G-17G. 2. Mesquita, E.T., et al. Int J Cardiovascular Sci. 2017; 30(1): 81-90. 3. Setoguchi S, et al. Am Heart J 2007;154:260-266.

Oral absorption of furosemide is poor and further diminished in HF with congestion



Representative serum concentration time profile after oral administration of 160 mg furosemide

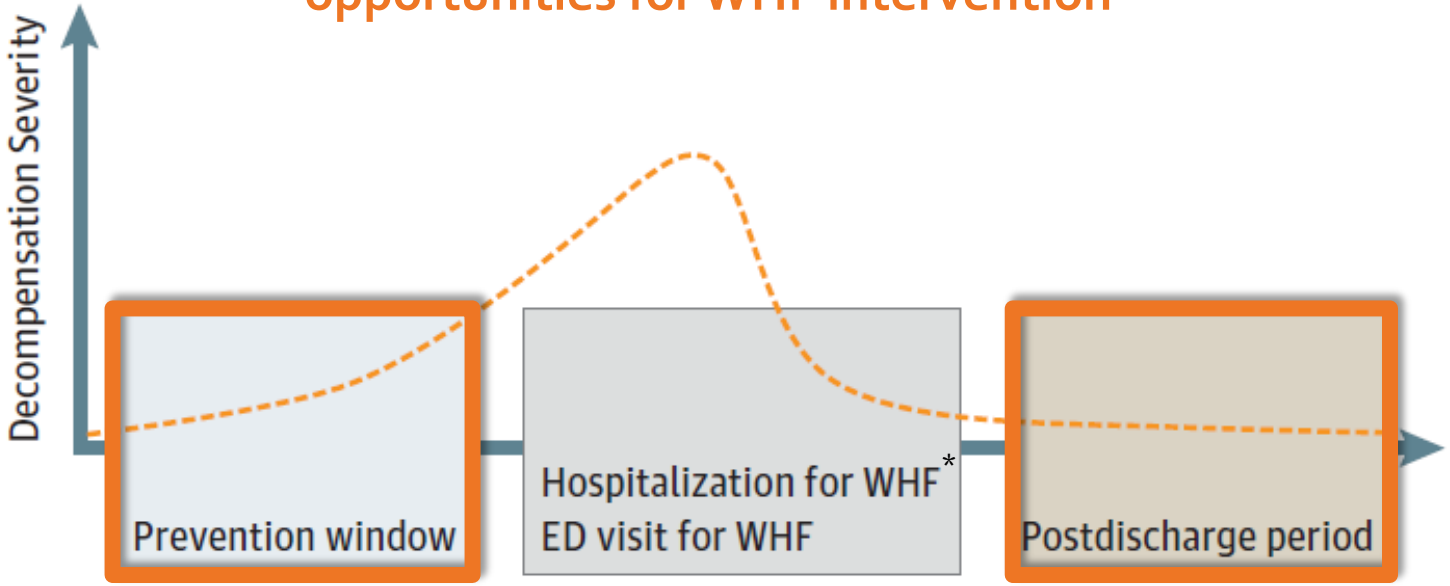


Guidelines recommend IV loop diuretics during episodes of worsening congestion in heart failure

1. Ellison DH and Felker GM, NEJM. 2017; 377(20): 1964-1975 . 2. Vasko MR, et al. Ann Int Med. 1985;102(3):314-8. 3. Mullens W, et al. Eur J of Heart Fail. 2019;21(2):137-55.

Primary opportunities for intervening in Worsening Heart Failure (WHF)

Pre-admission and post-discharge (readmission) are targeted opportunities for WHF intervention



*WHF: Worsening Heart Failure

Greene SJ, et al. JAMA Cardiol. 2018;3(3):3029-3039.

A New Model of Treating Heart Failure — FUROSCIX®

scPharmaceuticals

FUROSCIX — a subcutaneous formulation of furosemide

Enabling IV-equivalent diuresis at home

- FUROSCIX – 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 enables subcutaneous administration; eliminates skin irritation
- Delivered by an On-Body Infusor
  - SmartDose® Gen II 10 mL on-body delivery system
  - Developed to deliver fixed dose of 80mg of Furoscix 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
  - Pre-filled, Crystal Zenith® cartridge

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

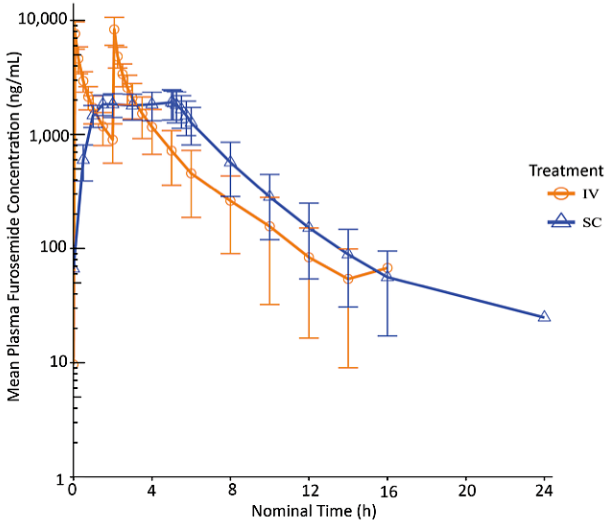
Incorporates West Pharmaceutical Services, Inc.'s (West) SmartDose platform technology

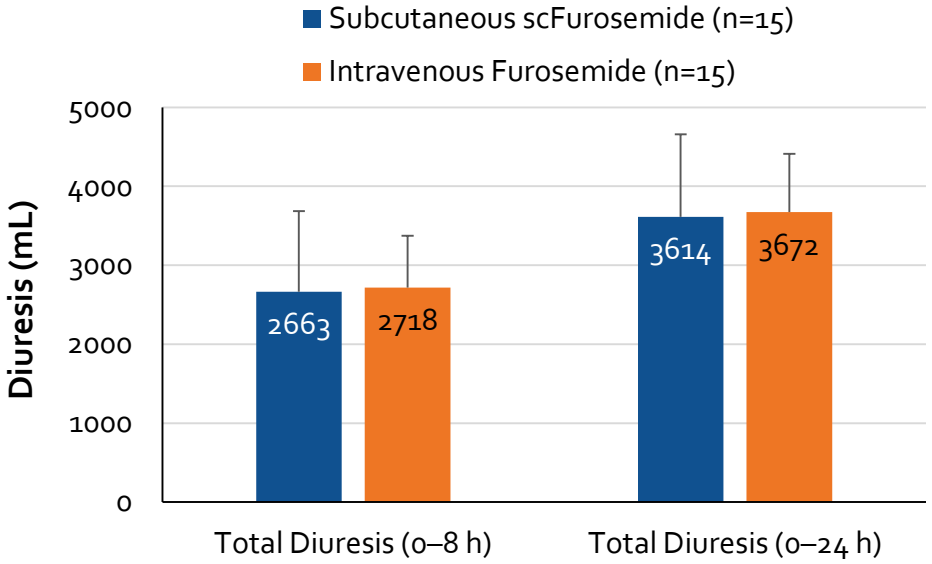
This platform technology has been previously approved by FDA and EMEA as part of a combination product

- Pre-filled drug cartridge
- Single-use, fully disposable Infusor
- Visual, tactile, and audible feedback
- Electromechanical drive
  - Delivery volume up to 10mL
- Delivery profile pre-programmed
- Patient-centric design
- Wireless connectivity capability

Subcutaneous furosemide drug exposures and diuresis observed to be comparable to IV furosemide

- Subcutaneous: 80 mg over 5 hours
- Intravenous: 40 mg x 2 doses over 2 hours



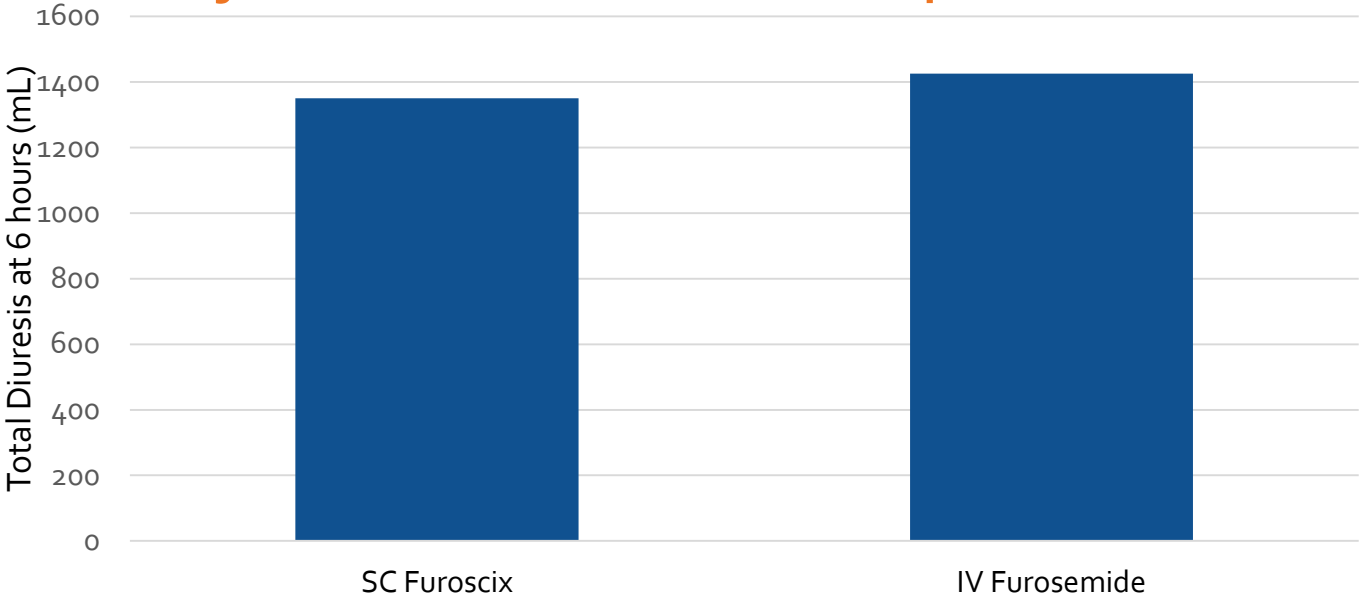


Absolute bioavailability: 99.6% (90% CI: 94.8-104.8%)

Sica DA, et al. JACC Basic to Transl Sci. 2018;3(1):25-34

FUROSCIX pharmacodynamics are IV equivalent

SC infusion of FUROSCIX produced comparable pharmacodynamics to IV bolus injections of furosemide in clinic patients with WHF



IV furosemide dose: Mean: 123 ± 47 mg; 58% received 160 mg

Weight Loss: SC: 1.5 ± 1.2 kg vs IV: 1.5 ± 1.1 kg

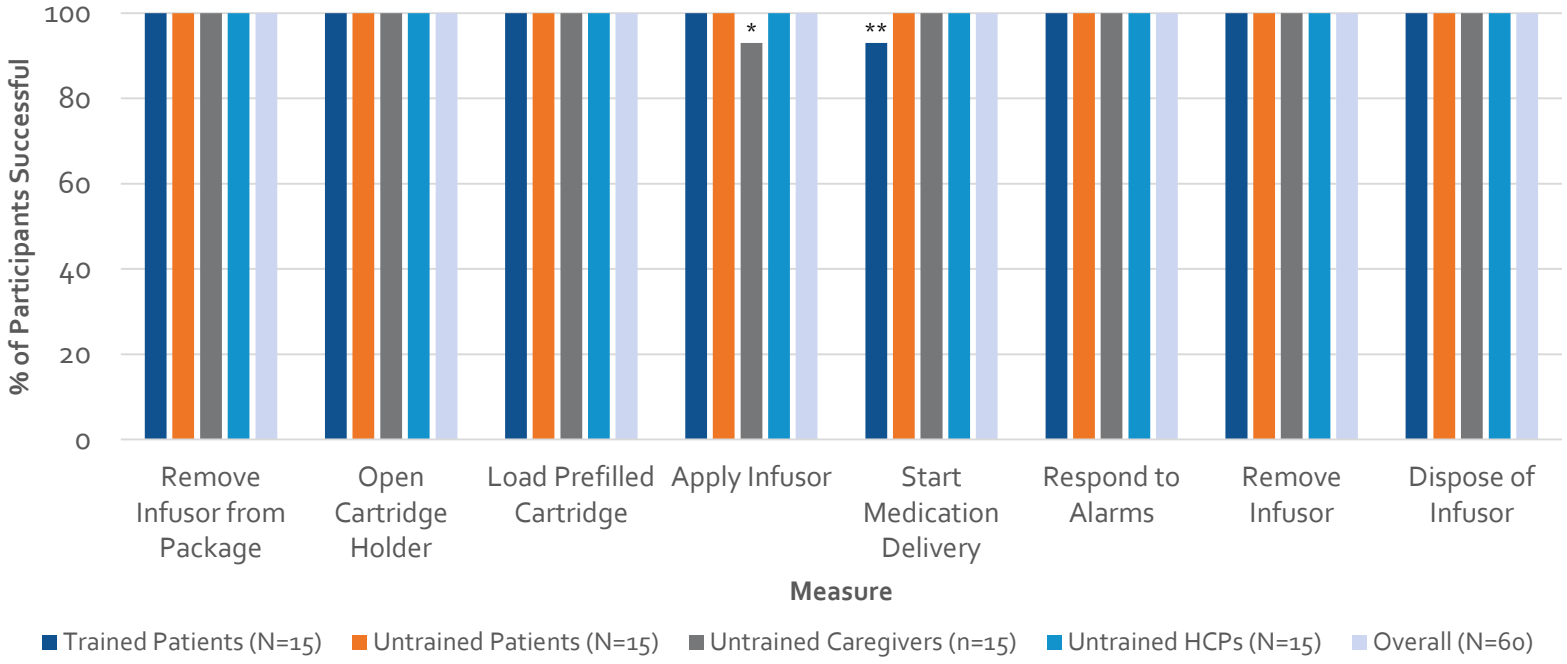
Gilotra NA, et al. JACC Heart Fail. 2018;6(1):65-70.

Human Factors Summative Validation Study

- In this summative study the On-Body Infusor and Instructions For Use (IFU) were successfully validated with the intended user populations (HF Patients, Caregivers, and HCPs)
  - Over 99% success rate for 900 observational use tasks (including critical tasks)
  - Over 99.5% success rate for 2,200 knowledge task/comprehension metrics
- Based on this study "we believe the On-Body Infusor and IFU can be safely and effectively used"
  - No patterns of preventable use errors observed

Data on file. scPharmaceuticals, Burlington, MA.

Human Factors Summative Validation Study Observational Use Task Highlights



* 1 untrained caregiver removed and reapplied adhesive liner to On-Body Infusor
** 1 trained patient did not press the blue start button

Data on file. scPharmaceuticals, Burlington, MA.

FUROSCIX — regulatory path

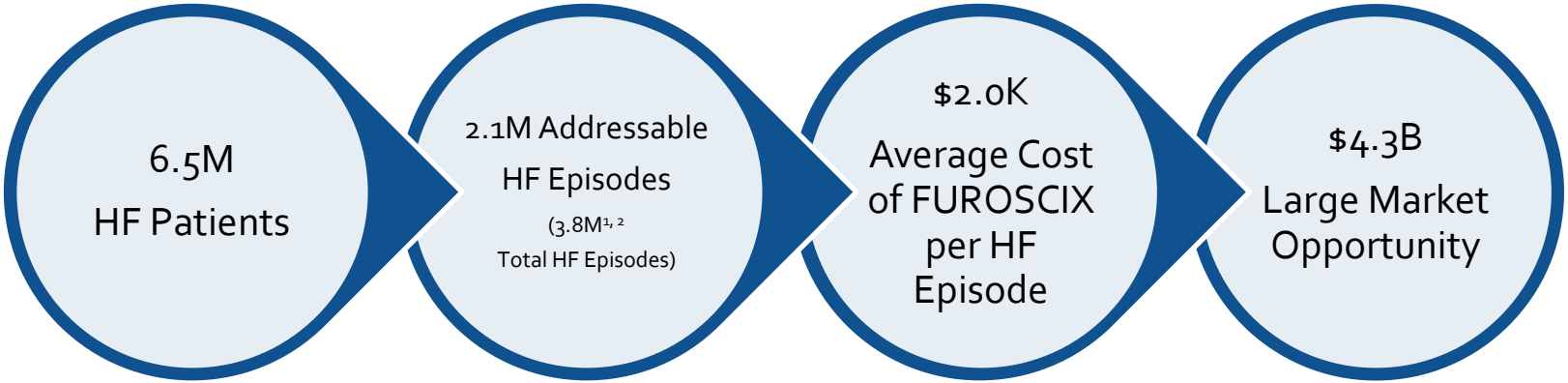
Anticipate the resubmission of FUROSCIX NDA with the U.S. Food and Drug Administration (FDA) by mid-year 2020

- Completed clinical safety, efficacy, and pharmacology studies
- Completed summative human factors study
- Completed preliminary feasibility with SmartDose delivery; device validation testing in process
- Product (drug and device) stability program in process
- Anticipate a Type 2 resubmission with a 6-month review period

FUROSCIX Value Proposition

FUROSCIX annual U.S. market opportunity

Potential paradigm shift in how HF is treated



Prevention of admissions and readmissions are targeted opportunities for HF intervention

1. Benjamin, et. al. Circulation 2018; 137(12):e67-e492. 2. Data on file. scPharmaceuticals, Burlington, MA

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

Payer

- Average cost to Medicare for a HF admission is $11,840[1]
- HF is top condition targeted by CMS readmission reduction initiative[2]
- Medicare Advantage plans bear both medical and pharmacy costs

Hospital and HCP

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

1. Fitch, et al. Cost Burden of Worsening Heart Failure in the Medicare fee for service population, Milliman, 2017. http://us.milliman.com/insight/2017/The-cost-burden-of-worsening-heart-failure-in-the-Medicare-fee-for-service-population-An-actuarial-analysis/ 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. Data on file. scPharmaceuticals, Burlington, MA.

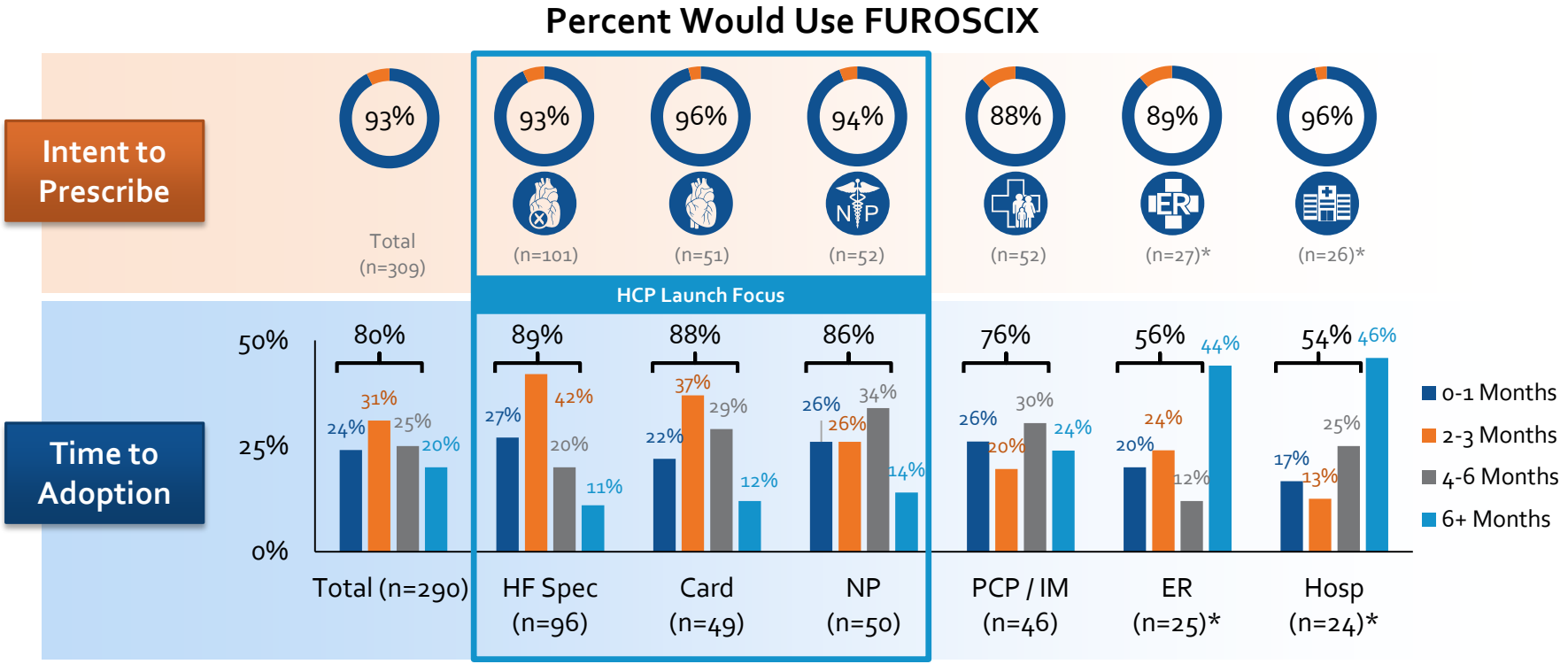
Hospital Readmission Reduction Program (HRRP)

- Medicare aims to reduce HF excessive readmissions by administering financial penalties under HRRP as part of the larger Medicare Shared Savings Program
  - Supports national goal of linking payment to quality of hospital care
  - Maximum penalty is a 3% reduction in payments
  - CMS calculates the penalty adjustment for each hospital based on performance over 3yrs

- In fiscal 2020, CMS will penalize 2,583 hospitals for too many Medicare readmissions in 30 days[1]
  - CMS will withhold~ $563M in Medicare payments to hospitals under HRRP
  - 83% of 3,129 hospitals evaluated received a penalty
  - Hospitals on the penalty list include large safety-net hospitals and academic medical centers
  - Heart failure is one of the original 3 conditions tracked to determine penalties

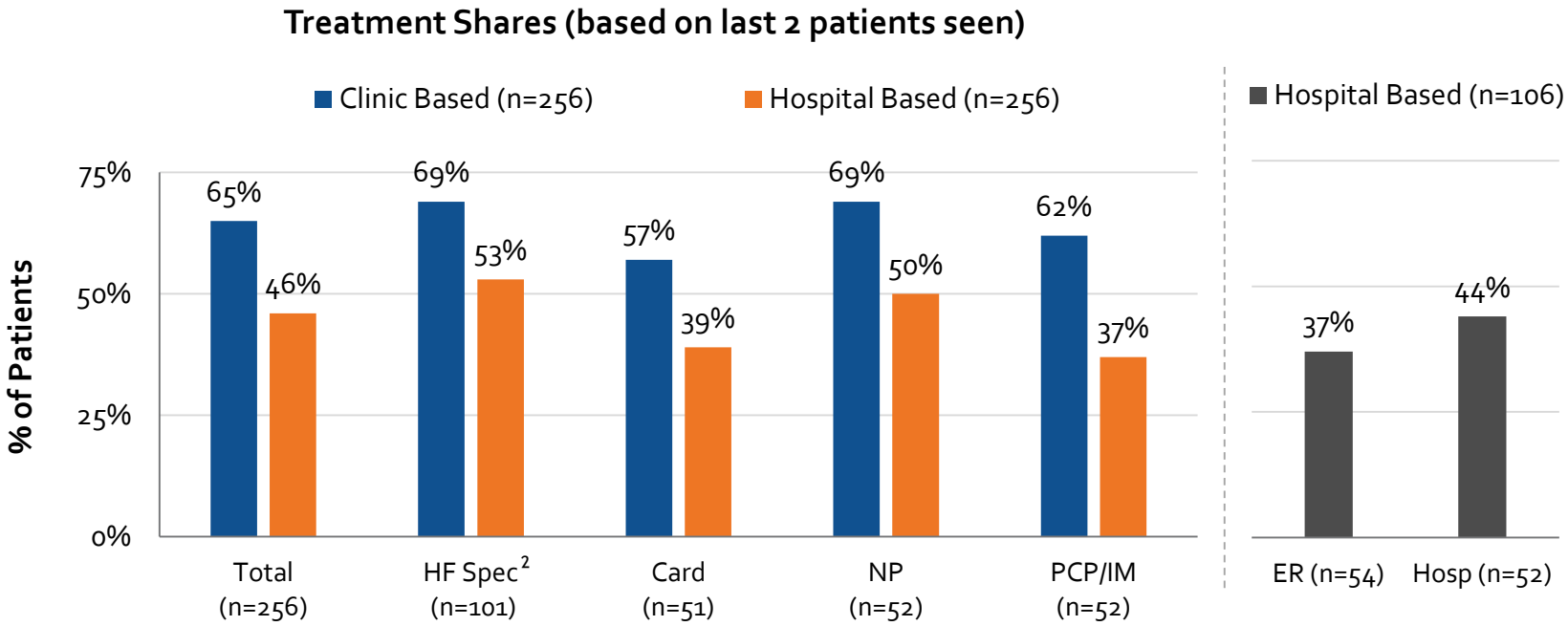
1. Kaiser Health News report citing federal data released Sept. 30, 2019 Readmission numbers and penalty information provided by CMS: https://www.cms.gov/Medicare/Medicare-Feefor-Service-Payment/AcuteInpatientPPS/Downloads/FY2018-CMS-1677-FR-Table-15.

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[1]



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?

Target Top Hospital Accounts with Affiliated Clinics

IV Furosemide and Discharge Volume Captured Based on Covered Deciles

Decile	Hospital Count	Normalized Discharge Volume	Normalized IV Furosemide Volume	% Cumulative Hospital Count	% Cumulative Discharge	% Cumulative IV Furosemide
10	57	7,202	13,047	1%	7%	13%
9	93	8,991	11,090	3%	16%	24%
8	125	9,978	9,940	5%	26%	34%
7	160	10,601	9,378	7%	37%	43%
6	198	10,816	9,187	11%	48%	53%

Covering deciles 7 and above hospitals (435) and their affiliated outpatient facilities captures 37% of the HF discharge volume and 43% of the IV furosemide volume used in affiliated HF community

Covering ~40% of the IV furosemide and HF discharge opportunity requires a sales force size of 40 territories

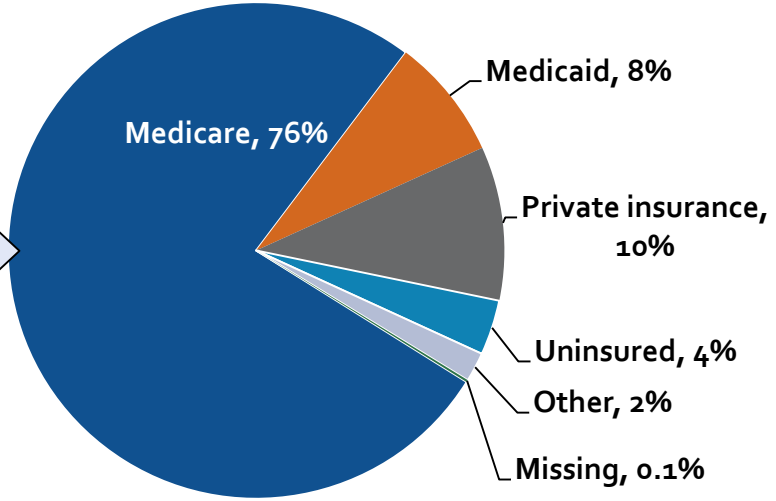
*From Sales Force sizing project conducted by consultant Trinity partners

HF payer mix and FUROSCIX value proposition

2017 Medicare Part D Insights

- 42 million Medicare patients with Part D coverage
  - 60% PDP; 40% MA-PDP
  - 29% receive full or partial LIS subsidies
- 17% (10 million) are active workers or have employer/ retiree coverage, VA, FEHB
- 12 million LIS/Dual Eligible patients with Part D overage
- 90% concentrated in 7 payers

Payer Mix for HF Patients (2013)



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

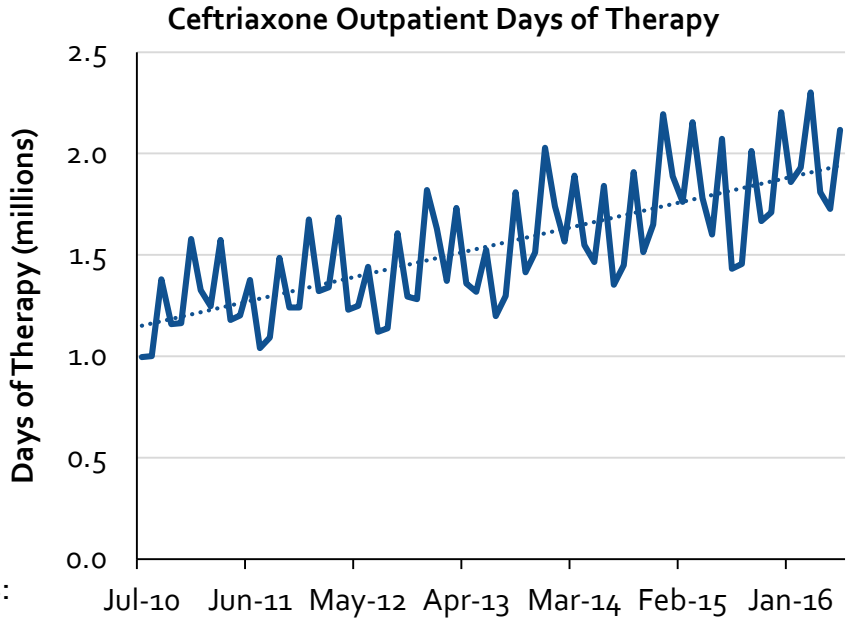
FUROSCIX Value: Reduction in PMPM costs when FUROSCIX is utilized

1. Data on file. scPharmaceuticals, Burlington, MA.

Anti-infective Program

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

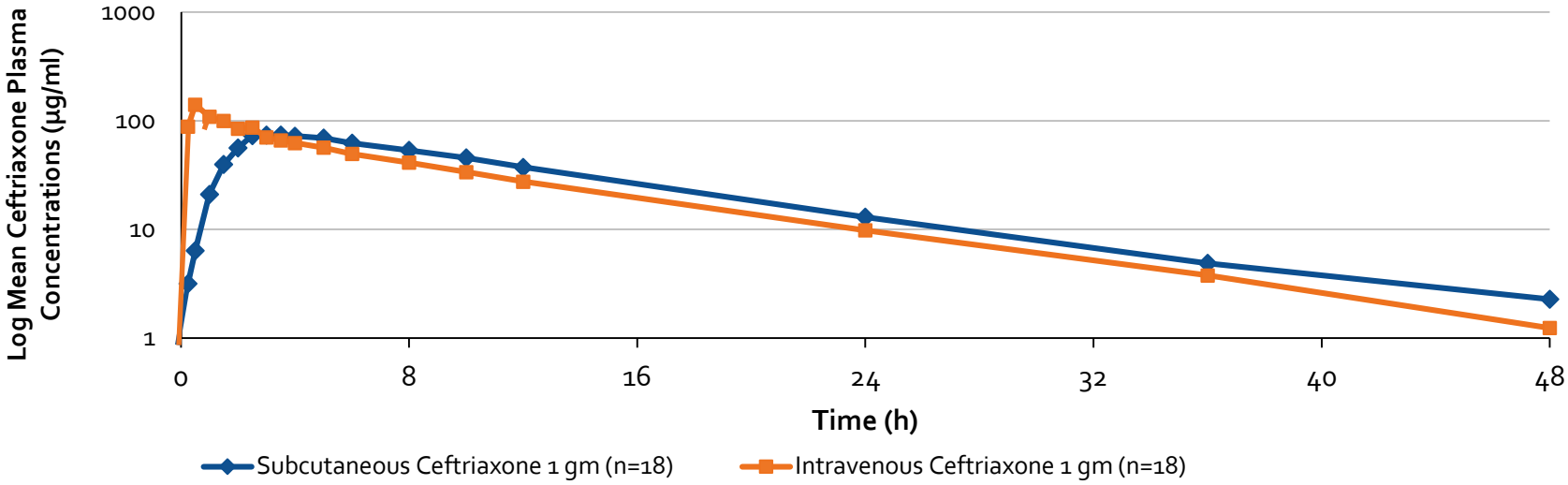
- ~15 million US ceftriaxone doses[1] in outpatient setting projected for 2021
- $4.5B total addressable market opportunity in the US projected for 2021
- Clear clinical and economic value proposition
  - Eliminate the reliance on intravenous catheters/ PICC lines
  - Avoid the need for coordination 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



1. Data on file. scPharmaceuticals, Burlington, MA.

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



1. Muntendam P, et al. Abstract 1966. Presented at ID Week; October 26-30, 2016; New Orleans, Louisiana. 2. Data on file. scPharmaceuticals, Burlington, MA.

Corporate Summary

Opportunity summary

- Pipeline includes products with large global market opportunity
  - FUROSCIX represents $4.3B US market opportunity
  - scCeftriaxone represents $4.5B US market opportunity
- Clear value proposition
- Established reimbursement model
- 505(b)(2) regulatory pathway
- High barriers to entry
  - IP on FUROSCIX to 2034, provisional patent 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

TURNING PATIENT CARE
INSIDE OUT

Thank you

scPharmaceuticals

Innovative outpatient solutions that bring care closer to home