

Pioneer in the treatment of drug-resistant fluid overload

liver disease, heart failure & cancer

Investor presentation – September 2022

Euronext: SEQUA.BR

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Regulatory disclaimer:

- The **alfapump**® system has not yet received regulatory approval in the United States and Canada. Any statement in this presentation about safety and efficacy of the **alfapump**® system does not apply to the United States and Canada. In the United States and Canada, the **alfapump**® system is currently under clinical investigation (POSEIDON Study) and is being studied in adult patients with refractory or recurrent ascites due to cirrhosis. For more information regarding the POSEIDON clinical study visit www.poseidonstudy.com.
- DSR® therapy is still under development and it should be noted that any statements regarding safety and efficacy arise from ongoing pre-clinical and clinical investigations which have yet to be completed. DSR® therapy is currently not approved for clinical research in the United States or Canada. There is no link between DSR® therapy and ongoing investigations with the **alfapump**® system in Europe, the United States or Canada.

COVID-19 disclaimer:

- Sequana Medical is closely following the evolution of the COVID-19 global health crisis and is in constant dialogue with its partners to assess the impact and adapt operations accordingly.
- Sequana Medical has put in place mitigation plans to minimise delays. The impact of increased demands on the healthcare systems, limitations on non-essential hospital visits and procedures, social-distancing and travel restrictions may result in further delays to execution of clinical studies and impact sales.
- Sequana Medical will continue to update the market as needed and whenever possible.

Note:

- alfapump**® is a registered trademark. DSR® and **alfapump** DSR® are registered trademarks in the Benelux, China, the EU, United Kingdom, and Hong Kong.

Uniquely positioned in two large markets



- **Proprietary technologies treating diuretic-resistant fluid overload**
 - Key clinical problem in liver disease, heart failure, renal failure and cancer
 - Diuretic-resistance is common – alternatives have significant disadvantages
- **Strong granted IP portfolio**

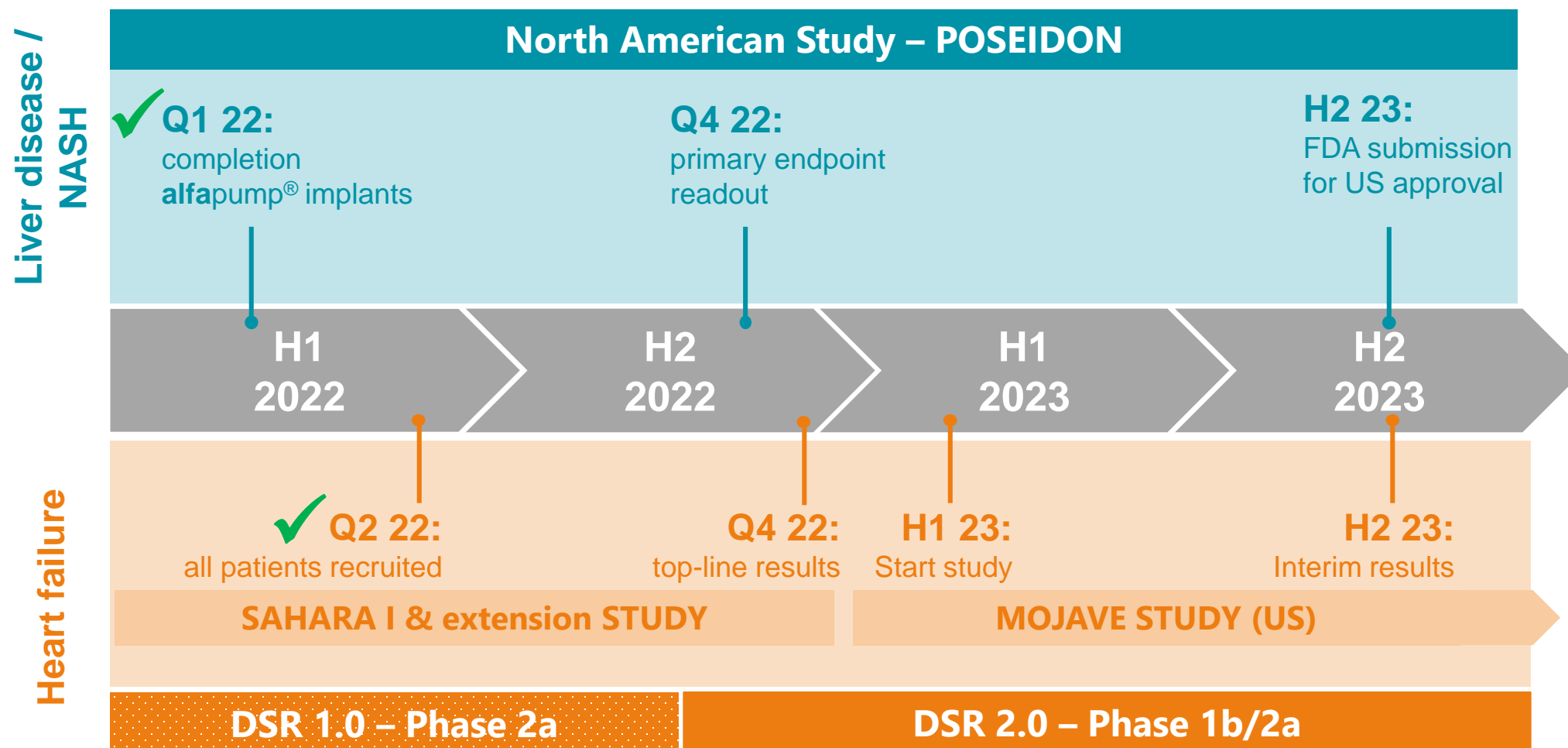


- **alfapump® in liver disease – market growing to €3Bn / year ⁽¹⁾**
 - NASH is changing liver cirrhosis market and driving growth
 - Approved in EU / FDA breakthrough designation in US
 - North American pivotal study de-risked / primary endpoint Q4 '22
 - Direct commercialization in US



- **DSR® in heart failure – multi-billion market opportunity**
 - Congestion is the primary driver of morbidity & hospitalization in heart failure
 - 1st generation DSR (DSR 1.0) – Clinical proof-of-concept with durable clinical improvements
 - 2nd generation proprietary DSR (DSR 2.0) – preparing US IND to start Ph. 1b/2a study in H1 2023
 - Establish partnership based on Ph. 1b/2a randomized controlled US study

Strong Outlook for Value Drivers



Notes:

SAHARA I = SAHARA study using DSR 1.0; SAHARA extension = SAHARA study using DSR 2.0

Timelines subject to further developments related to the ongoing COVID-19 pandemic

Description and timing of these studies are subject to change and/or feedback from applicable regulatory authorities



alfapump®

Proven step change in the treatment of liver
refractory ascites



sequanamedical

alfapump

Eliminating fluid from the peritoneal cavity – working in partnership with the bladder



Fully implanted



Automatic operation



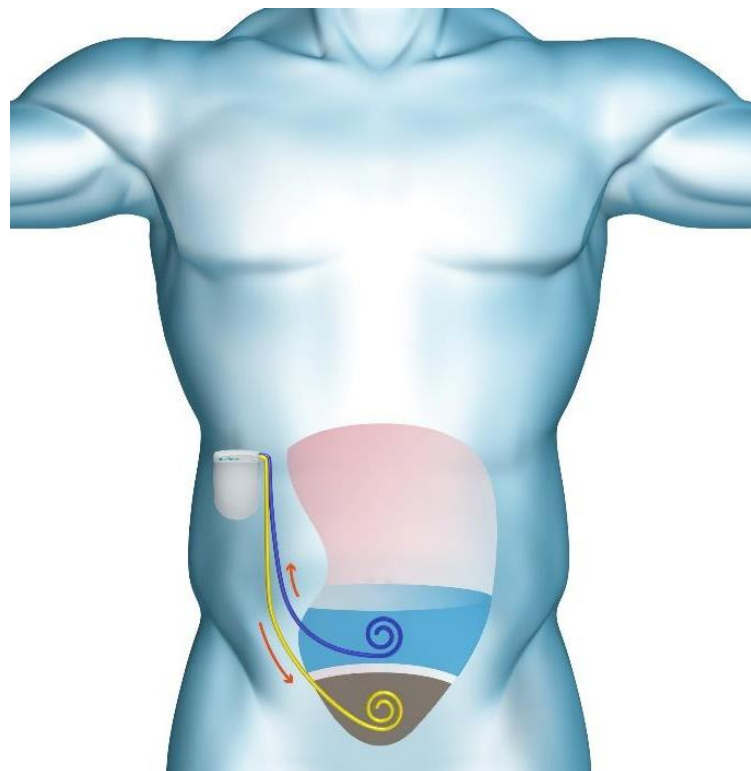
Wireless battery charging



Settings wirelessly adjusted



Remote data monitoring



Easy implantation



Long-term implantation & catheter patency



Moves up to 4 litres / day



Virtually non-clogging

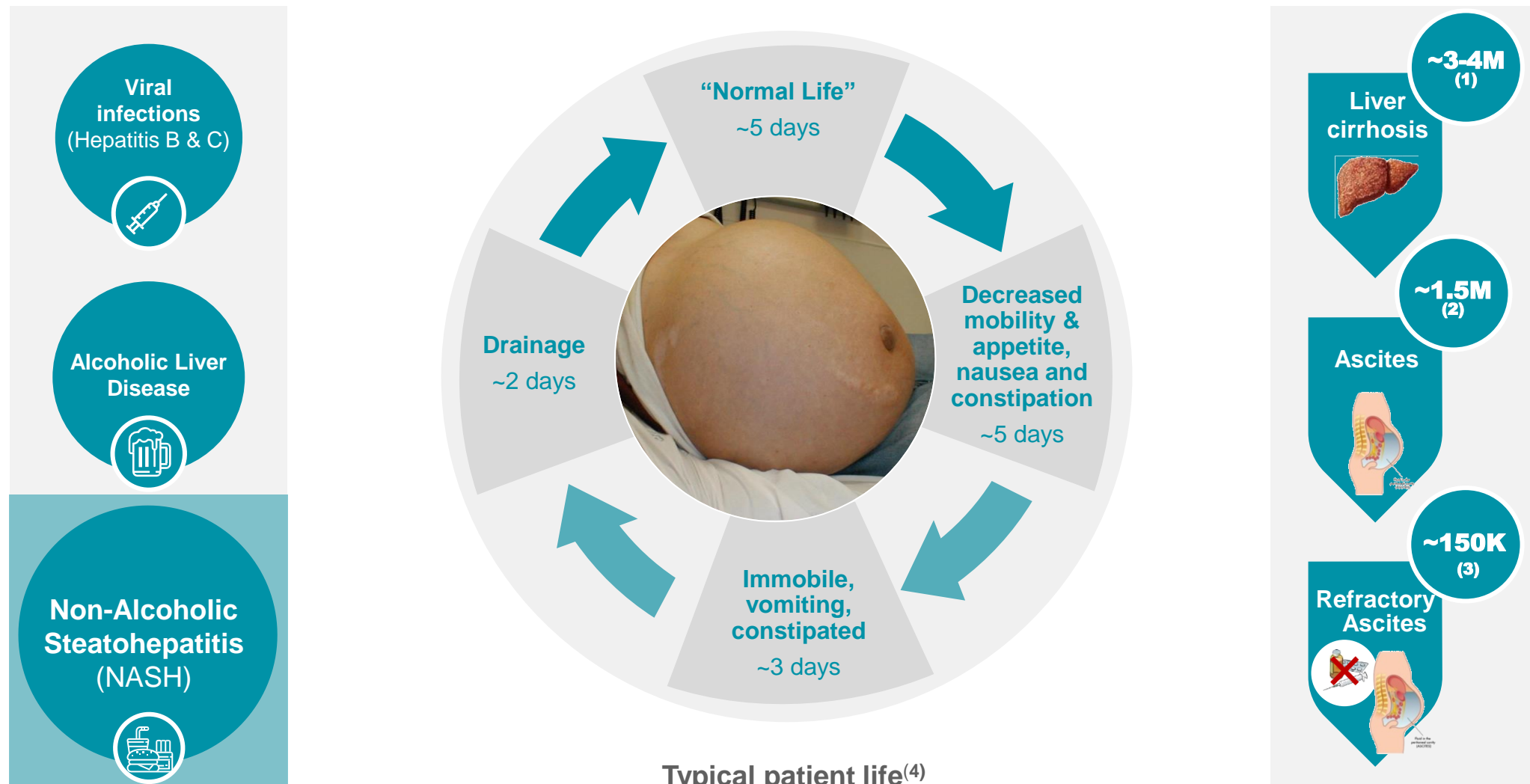


No significant heating during charging and operation

Proven capabilities – over 950 systems implanted
Strong IP barriers through extensive patent portfolio & know-how

Refractory ascites – key complication of liver cirrhosis

Fatty liver disease / NASH is driving dramatic growth and change in attitudes to liver cirrhosis patients



Note : Prevalence of NASH in US is expected to increase by 63% between 2015-2030; Estes et al., 2018

Source 1 Management estimate in US based on Estes et al; GlobalData Nash Epidemiology Forecast to 2026; Nouredin et al., 2013

Source 2: Runyon 2009: approximately 50% of cirrhotic patients develop ascites within 10 years of diagnosis of cirrhosis

Source 3: Ginès et al., NEJM 2004: refractory ascites occurs in 5-10% patients with ascites

Source 4: Presentation of Dr. Rajiv Jalan at EASL in 2018, Large Volume Paracentesis (LVP) treatment cycle for refractory ascites

NASH transforming the face of liver cirrhosis

In US, liver cirrhosis is transitioning to a mainstream disease requiring modern treatment options



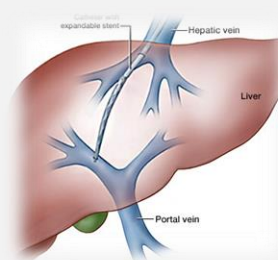
Limitations of existing therapies

Drainage (“Large Volume Paracentesis / LVP”)



Painful, Poor Quality of Life, Short Term Benefit

Transjugular Intrahepatic Portosystemic Shunt (TIPS)



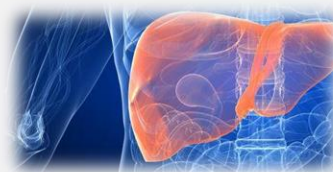
Complications, Contraindications

Permanent Catheter System



External Catheter, Risk for Infections / Blockage

Liver transplantation



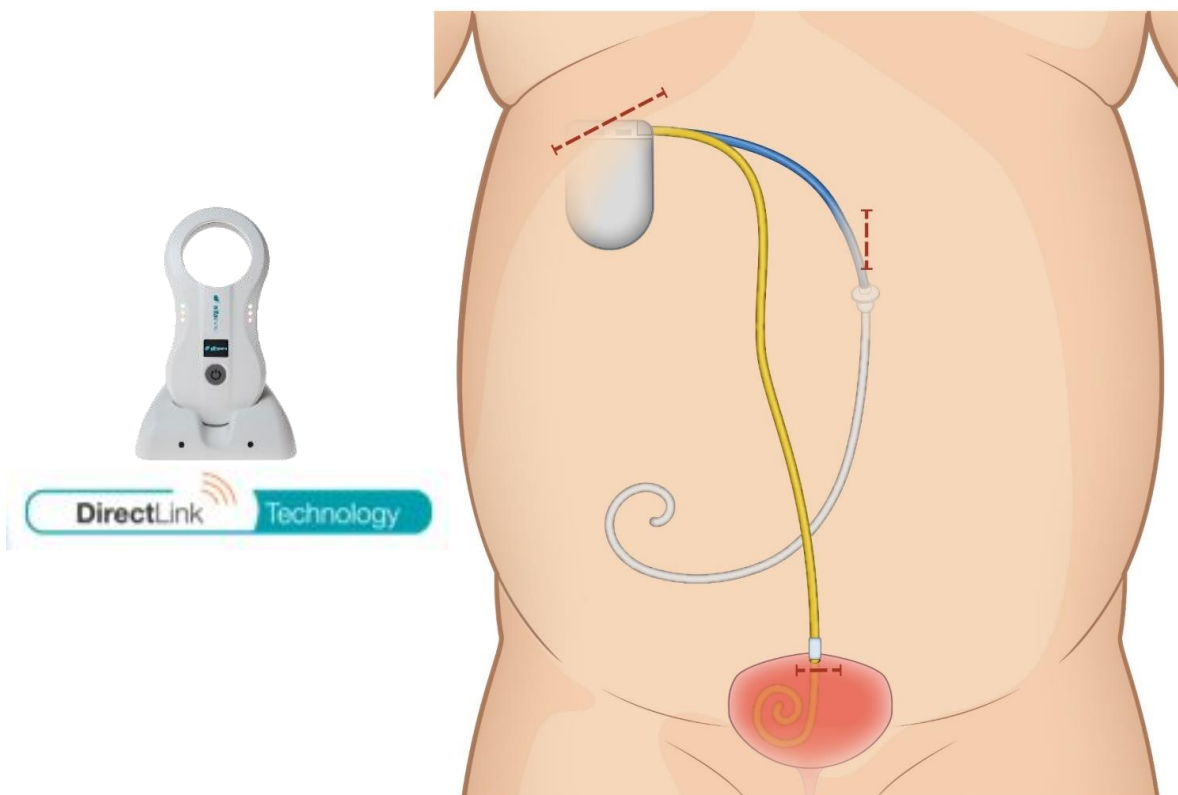
High Cost, Limited Availability

alfapump



alfapump strong clinical and economic rationale

Over 950 implants and hundreds of years of patient experience



- ✓ Reduced burden of disease
- ✓ Improved patient QoL
- ✓ Cost savings for hospitals and payers

Estimated treatment cost / patient*:

LVP: ~\$54K	↔	alfapump®: ~\$35K
~\$1.8K / LVP ⁽¹⁾		~\$25K / alfapump
2 LVP / month		~\$10K / implantation
15 months		

* Management estimate of US treatment costs, assuming no complications

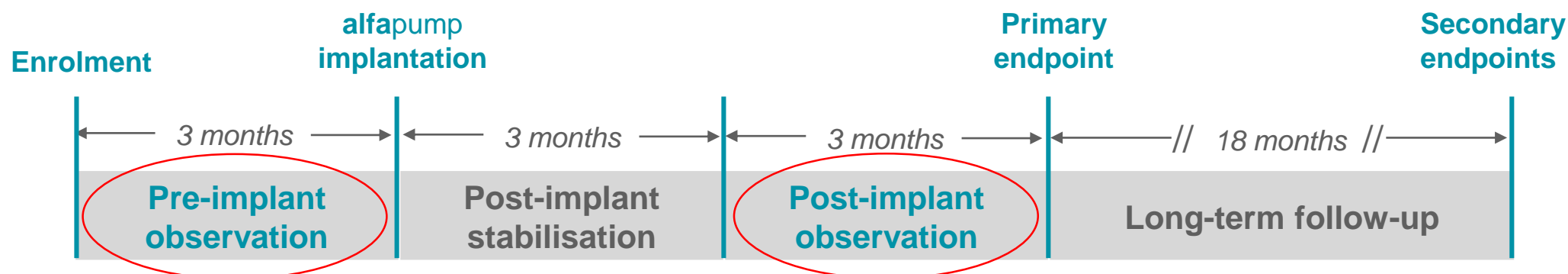
QoL: Quality of Life; LVP: Large Volume Paracentesis



**Breakthrough Device
Designation**

North American Pivotal Study (POSEIDON) underway

Pivotal Cohort of 40 implanted patients; Roll-In (“training”) cohort of 29 implanted patients



POSEIDON Study Endpoints

Primary efficacy: 1) 50% reduction in average monthly frequency of Therapeutic Paracentesis (“TP”) post-implant vs. pre-implant
2) 50% of patients achieve a 50% reduction in the requirement for TP post-implant vs. pre-implant

Primary safety: Rate of **alfapump** related re-interventions adjudicated by the Clinical Events Committee (CEC)

Secondary: QoL (SF36, Ascites-Q), nutritional status, health economics, safety (device and/or procedure-related AEs), survival

Interim POSEIDON: Positive for primary endpoints

Data from first 26 Roll-In patients clinically derisks the study

EFFICACY

- ✓ Over 90% reduction in mean Therapeutic Paracentesis (TP) frequency (primary endpoint >50% reduction)
- ✓ 100% patients with > 50% reduction in mean TP frequency per month (primary endpoint >50% of patients)

SAFETY

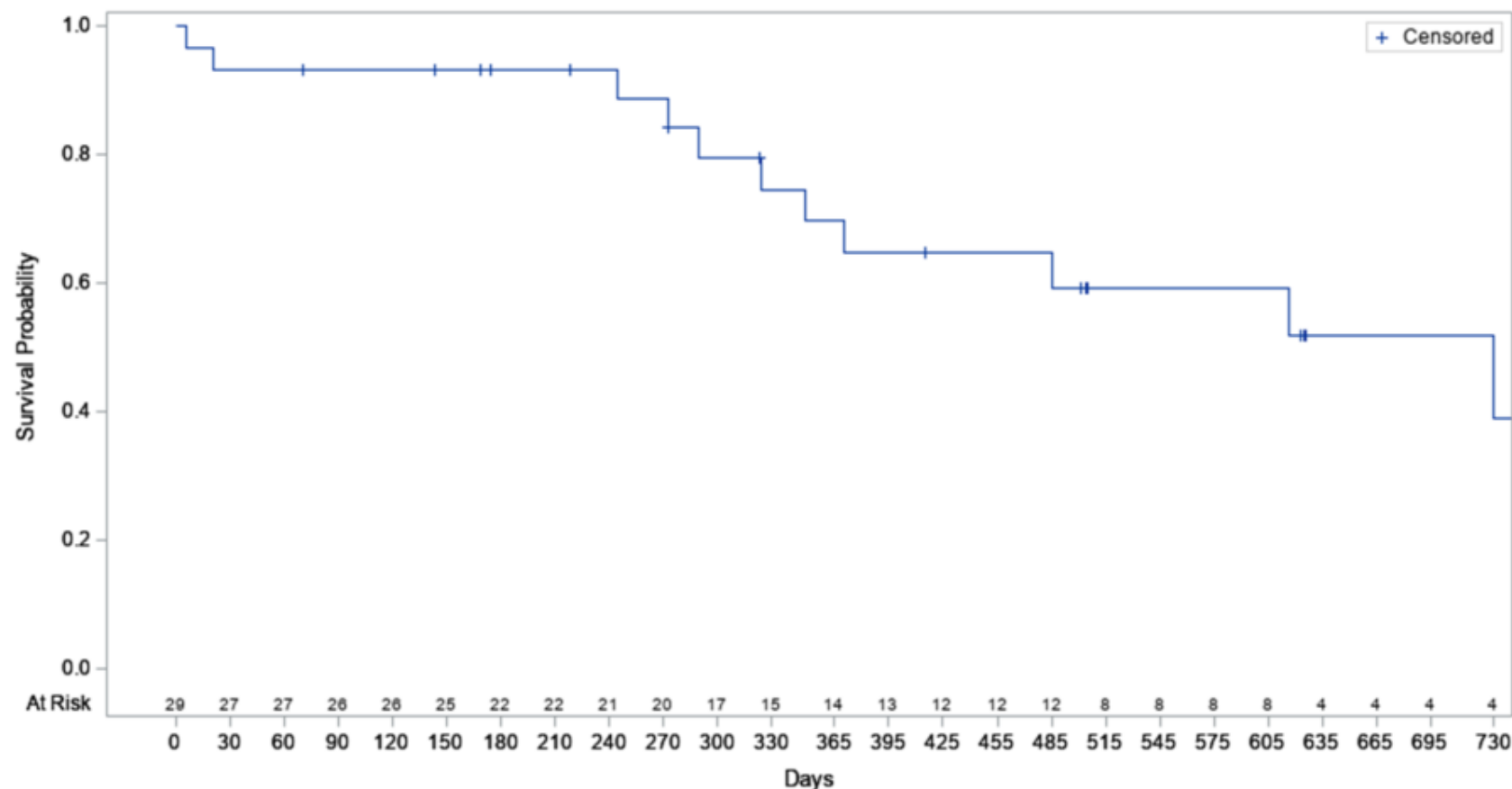
- ✓ In line with expectations – 3 composite primary safety events

QUALITY OF LIFE

- ✓ Clinically important improvement maintained for up to 12 months post-implantation

Interim POSEIDON: 70% survival at 12 months*

Compares favourably to published literature







***Published literature cited in AASLD practice guidelines:
survival rate for refractory ascites patients of only 50% at 12 months¹***

*Preliminary survival rate analysis of Roll-In Cohort (25 March 2022)

Source 1: Biggins et al., Hepatology, Vol. 74, No. 2, 2021, AASLD Practice Guidance; Moreau R et al., Liver International 2004; 24: 457-464

North American alfapump approval on track for 2024

2022		2023	2024
		POSEIDON	
Completion ✓ alfapump implants	Primary endpoint readout		Secondary endpoint readout
		★ PMA submission	★ US Launch
US Commercial Scale-Up		 Head of N. America	 Clinical specialists  Sales Reps



*NTAP for breakthrough devices de-risks reimbursement in key Medicare population**

**On the basis of existing ICD-10 codes issued for the alfapump, the likely DRG coding will be 423, 424 and 425 "OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES"*

PMA: Pre-Market Approval; **NTAP:** New Technology Add-On Payment

US – Go direct to 140 liver transplant centres

Highly efficient approach to target doctors and patients – driven by treatment guidelines



DSR®

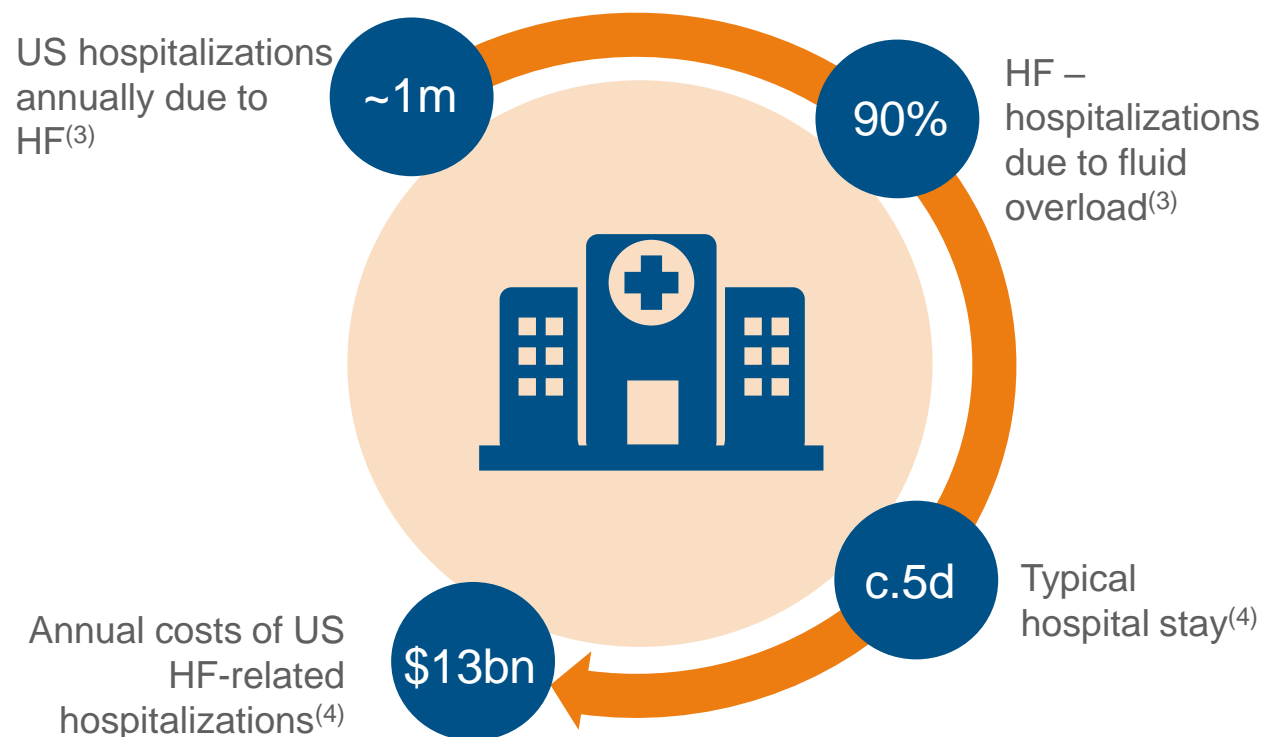
A disease-modifying heart failure drug
therapy



sequanamedical

Diuretic-resistant congestion in heart failure

Congestion (AKA Fluid Overload) is the primary driver of morbidity and hospitalization in heart failure patients



- 40% of heart failure patients on IV loop diuretics have a poor response⁽¹⁾
- 24% re-admission rate at 30 days⁽²⁾

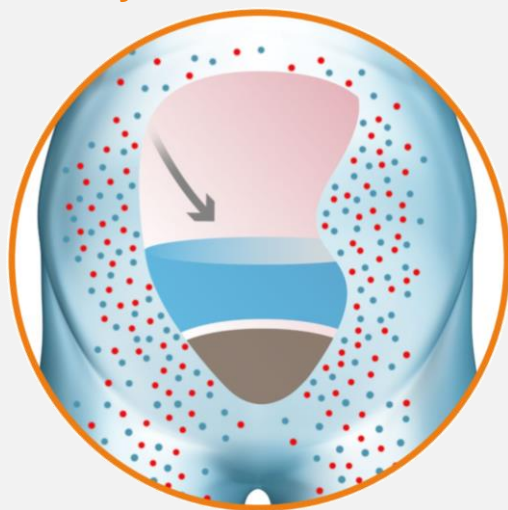


Direct Sodium Removal (DSR)

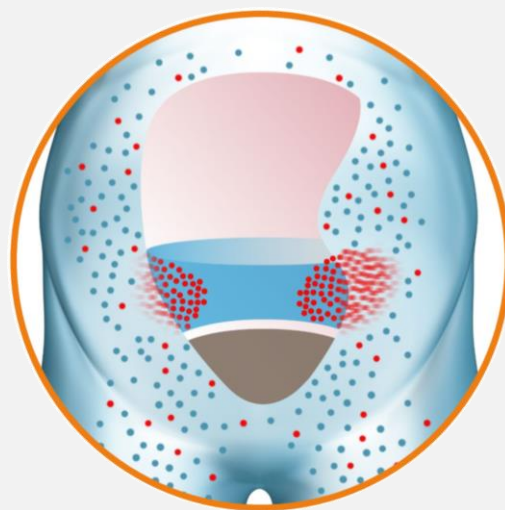
Eliminating fluid spread across the body – working in partnership with the kidneys



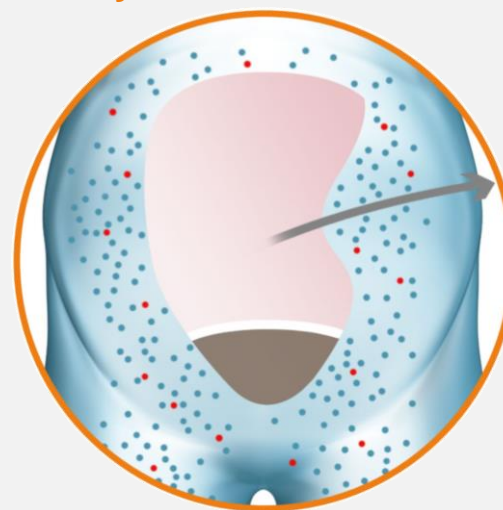
- 1 Sodium-free DSR product administered to peritoneal cavity



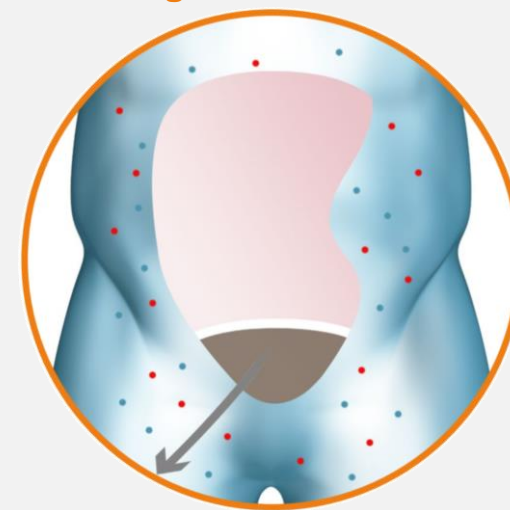
- 2 Sodium diffuses from body into DSR product



- 3 DSR product + extracted sodium removed from the body



- 4 Body eliminates free water to restore sodium balance, reducing the fluid overload



RED DESERT: Successful Proof-of-Concept Study

8 euvoletic HF patients on high dose diuretics treated with DSR 3x per week up to 6 weeks

Highly effective management of fluid and sodium balance

- Generally safe and well tolerated; no clinically relevant hyponatremia

Significant improvement in cardio-renal status

- 30% decrease* in NT-proBNP** ($p < 0.001$)
- 22% increase* in eGFR** ($p < 0.001$)

Dramatic and sustained improvement in diuretic response

- End of 6-week study: over 150% increase** in diuretic response***

No congestion-related heart failure re-hospitalizations

Presented as
Late-Breaker and
Highlight at
Heart Failure 2021

“Simultaneous normalization of diuretic response and improvement in cardio-renal status is a never before seen treatment effect” – Dr. Testani, Yale

* Paired statistical analysis of patients with baseline and D42 value (N=7); ** mean value; ***assessed by 6-hour excretion of sodium after IV administration of 40mg furosemide

NT-proBNP: N-terminal-pro hormone B-type Natriuretic Peptide (analysed in local lab); eGFR: estimated glomerular filtration rate

SAHARA I (Interim): DSR Tackles Congestion

10 evaluable decompensated diuretic-resistant HF patients on intensive DSR therapy¹

Safely, effectively and rapidly eliminate persistent congestion & restore euvolemia

- Weight loss* of ~6kg vs. baseline
- No clinically relevant hyponatremia

Considerably benefit cardio-renal status

- More than 30% reduction* in NT-proBNP
- Stable eGFR despite dramatic fluid loss

Dramatic and sustained improvement in diuretic response**

- End of intensive DSR: more than doubling* to near normal levels

No congestion-related heart failure re-hospitalizations

“These interim results are highly encouraging and could potentially provide a course of therapy for severely ill diuretic-resistant heart failure patients with persistent congestion where alternative treatment options are currently exceedingly limited” – Dr. Testani, Yale

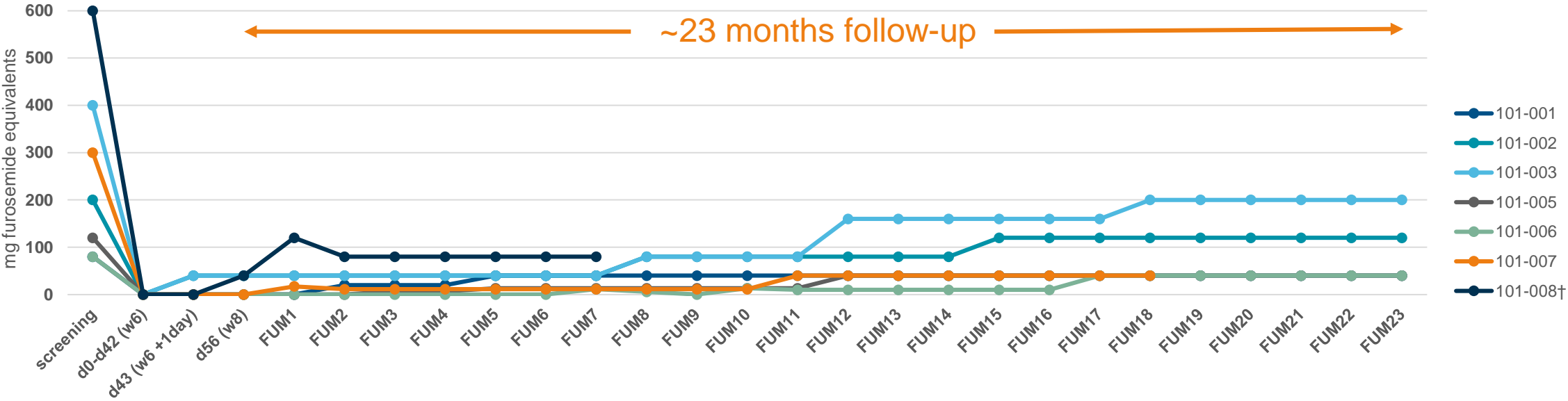
¹ two additional patients were enrolled but one patient died due to a cardiac arrest three days after study initiation and for one patient the study protocol was not correctly applied

*mean value; ** assessed by 6-hour excretion of sodium after IV administration of 40mg furosemide; **NT-proBNP**: N-terminal-pro hormone B-type Natriuretic Peptide (analysed in local lab); **eGFR**: estimated glomerular filtration rate

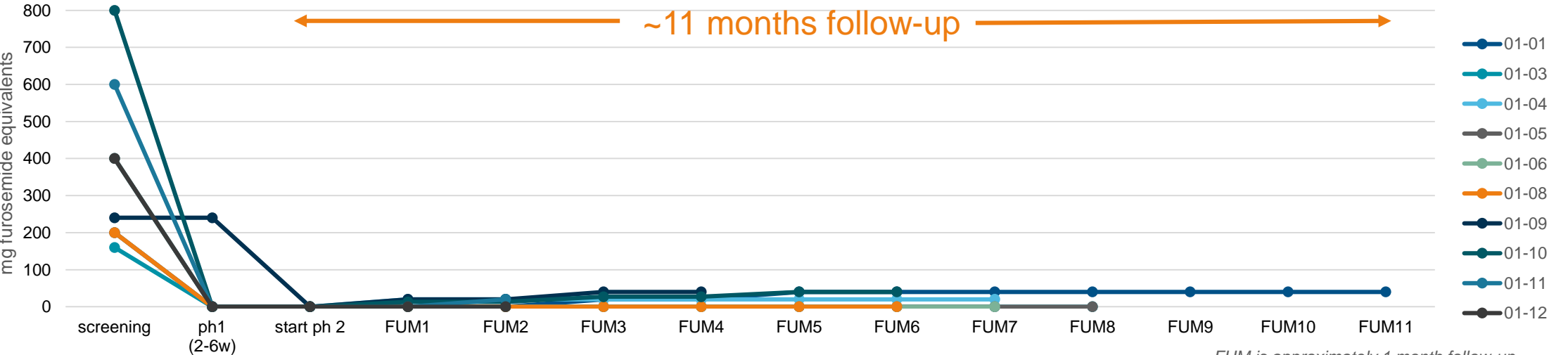
Long-Term & Major Reduction in Loop Diuretic Dosing

Clear demonstration of improvement in cardio-renal health – driving improved clinical outcomes

RED DESERT



SAHARA I

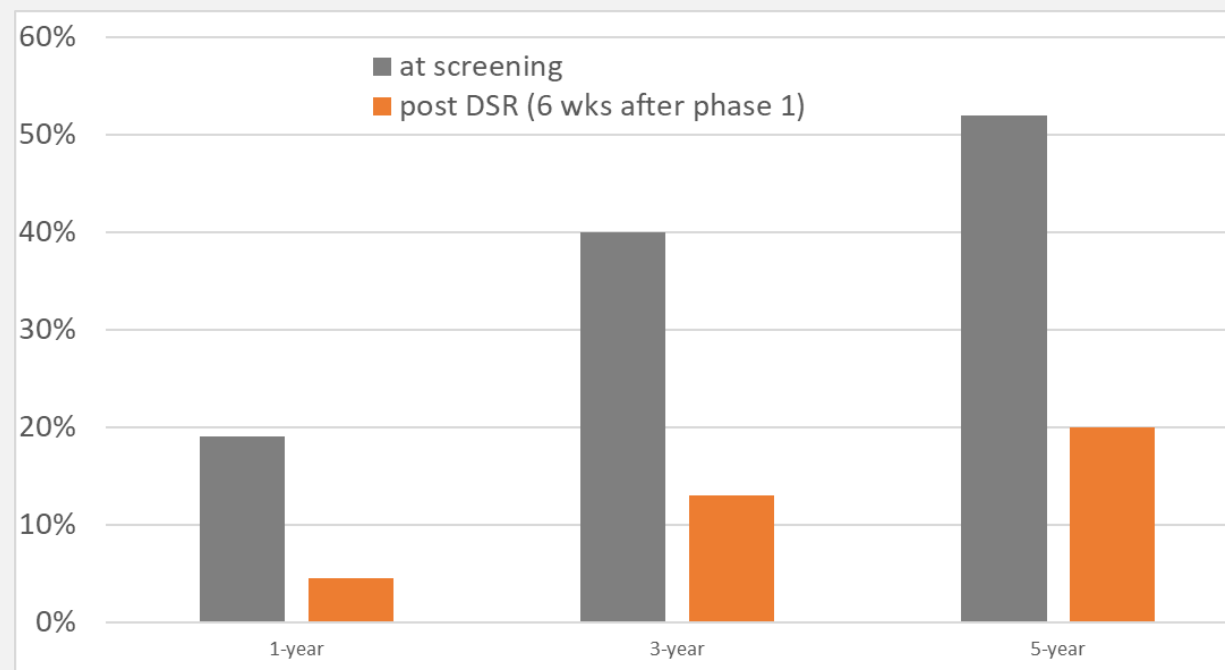


FUM is approximately 1 month follow-up

Strong Reduction in Predicted Mortality

Over 75% reduction in predicted one-year mortality based on Seattle Heart Failure Model*

- Seattle Heart Failure Model is a highly validated model to predict survival in heart failure
 - Validated in approx. 10,000 heart failure patients in over 46 countries with >17,000 person-years follow-up
 - Excellent accuracy, with predicted vs. actual one-year survival rate of respect. 90.5% vs. 88.5%
- Substantial reduction in overall predicted mortality post DSR* vs. screening, at 1y, 3y and 5y:



* Predicted one-year survival analysis using Seattle Heart Failure Model with seven patients from RED DESERT and eight patients from SAHARA I pre- and post-intensive DSR therapy. Analysis includes physician-assessed data collected post hoc.

** Post DSR = 6 weeks after phase 1 (phase 1 = 6th week in RED DESERT; 2nd, 4th or 6th week in SAHARA)

Moving to Proprietary DSR 2.0

Improved clinical and safety profile driving high margin recurring revenue stream

DSR 1.0

Sodium-free D10% (off-the-shelf)

- ✓ Clinical proof-of-concept
- ✓ Rapid clinical path
- ✗ Therapeutic profile / Ease of use
- ✗ Safety profile

RED DESERT & SAHARA I*



DSR 2.0

Sodium-free dextrose / icodextrin (proprietary)

- ✓ Improved therapeutic profile
- ✓ Favorable safety profile
- ✓ Strong granted IP position in US & Europe
 - “Low or no sodium drug for the treatment of heart failure”
 - IP protection drives recurring revenue from high gross margin consumable
- First-in-human insights through extension of SAHARA with a small number of patients to support US IND
- Preparations US IND filing ongoing to start Phase 1b/2a MOJAVE study in H1 2023

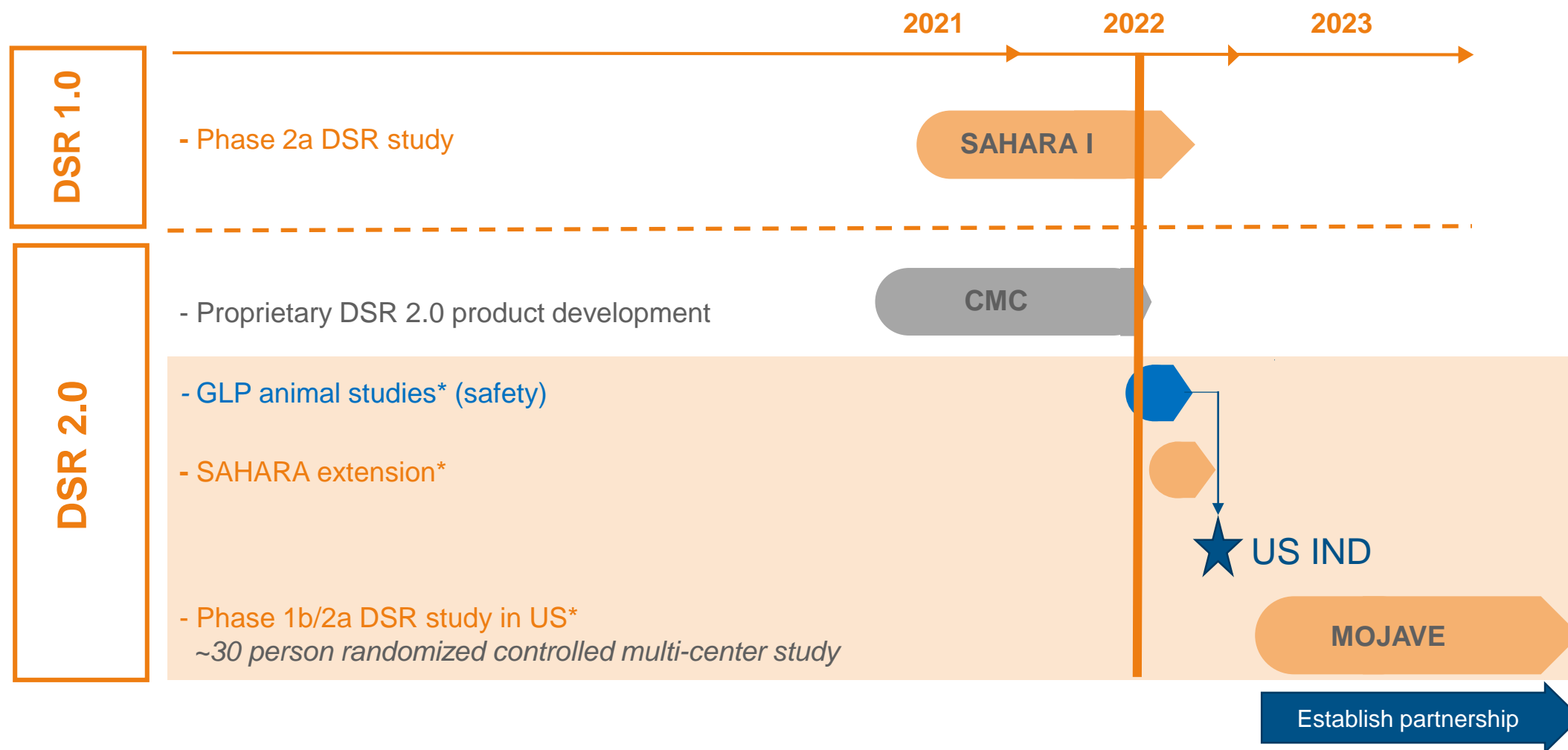
SAHARA EXTENSION & MOJAVE



* SAHARA I = SAHARA study using DSR 1.0

MOJAVE as Package for DSR Partnering

Leveraging the strengths of established HF player to realise commercial potential of DSR



Timelines subject to further developments related to the ongoing COVID-19 pandemic

* Description and timing of these studies are subject to change and/or feedback from applicable regulatory authorities

Multi-Billion Market Opportunity

Delivering value through reduced hospitalization and improved survival

- ~400K HF patients hospitalized per year in the US and EU (“frequent flyers”)
 - High cost patients with major burden on healthcare systems, payors and patients
- Value based pricing of DSR drug driven by:
 - ⇒ Reduction in re-hospitalization ~\$40K annual HF hospitalization cost per patient
 - ⇒ Increase in survival (gain in quality-adjusted life-year, “QALY”)

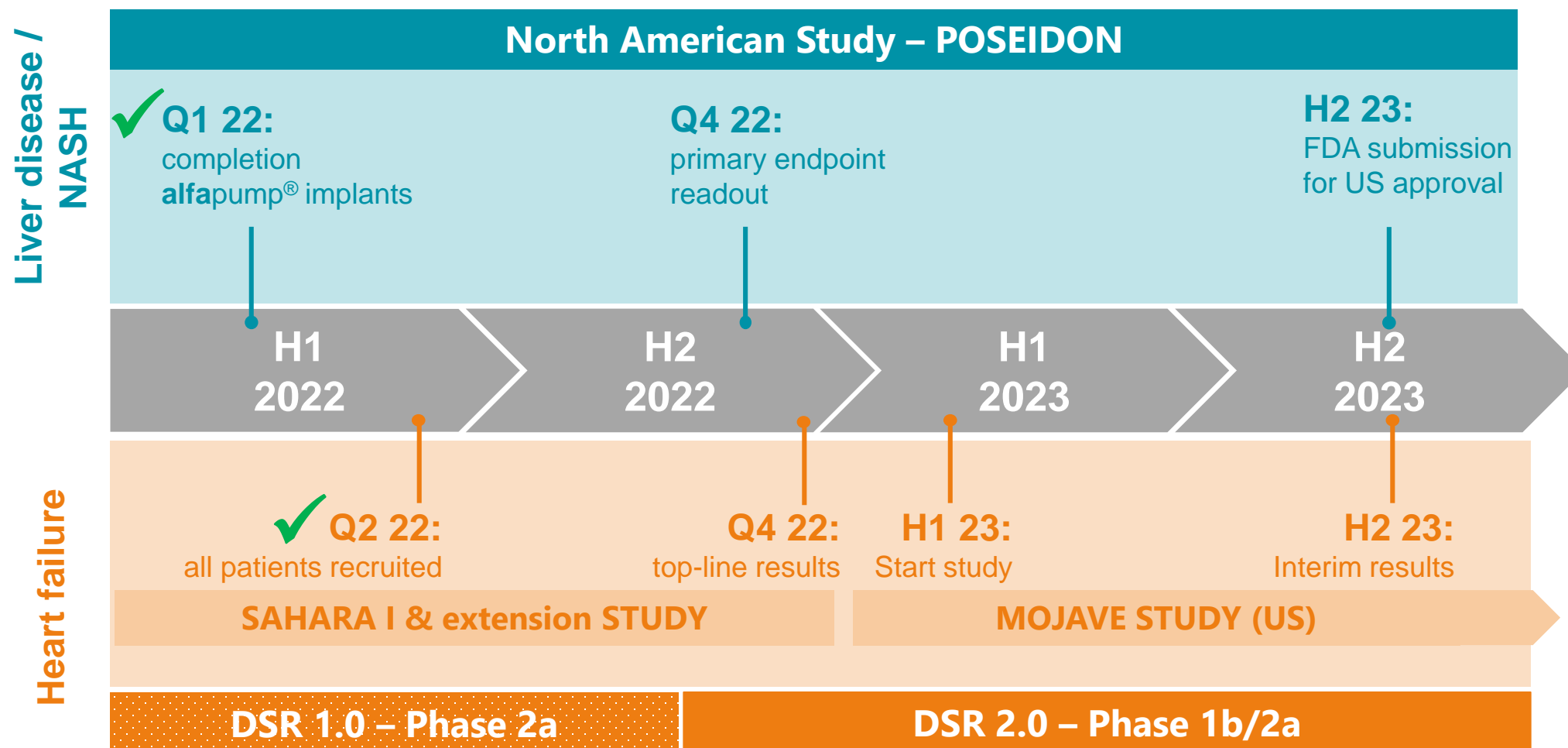


Outlook

Strong near term value drivers with clear
long term potential

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Strong Outlook for Value Drivers



Notes:

SAHARA I = SAHARA study using DSR 1.0; SAHARA extension = SAHARA study using DSR 2.0

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Strongly positioned for growth in both our markets



- **alfapump in liver disease / NASH – over €3 Bn / year ⁽¹⁾**
 - NASH is changing liver cirrhosis market and driving growth
 - FDA breakthrough device status / Strong IP portfolio
 - North American pivotal study de-risked – Fully implanted / Positive interim data
 - North American approval on track for 2024 / Go direct to 140 liver transplant centres



- **DSR in heart failure – multi-billion market opportunity**
 - Clearing congestion while preserving renal function is a key objective of heart failure therapy
 - Clinical proof-of-concept with DSR 1.0 – A heart failure disease-modifying drug therapy
 - Development of proprietary DSR 2.0 – Strong IP / Driver of high margin recurring revenue
 - Establish partnership based on MOJAVE Phase 1b/2a randomized controlled US study

Contact info

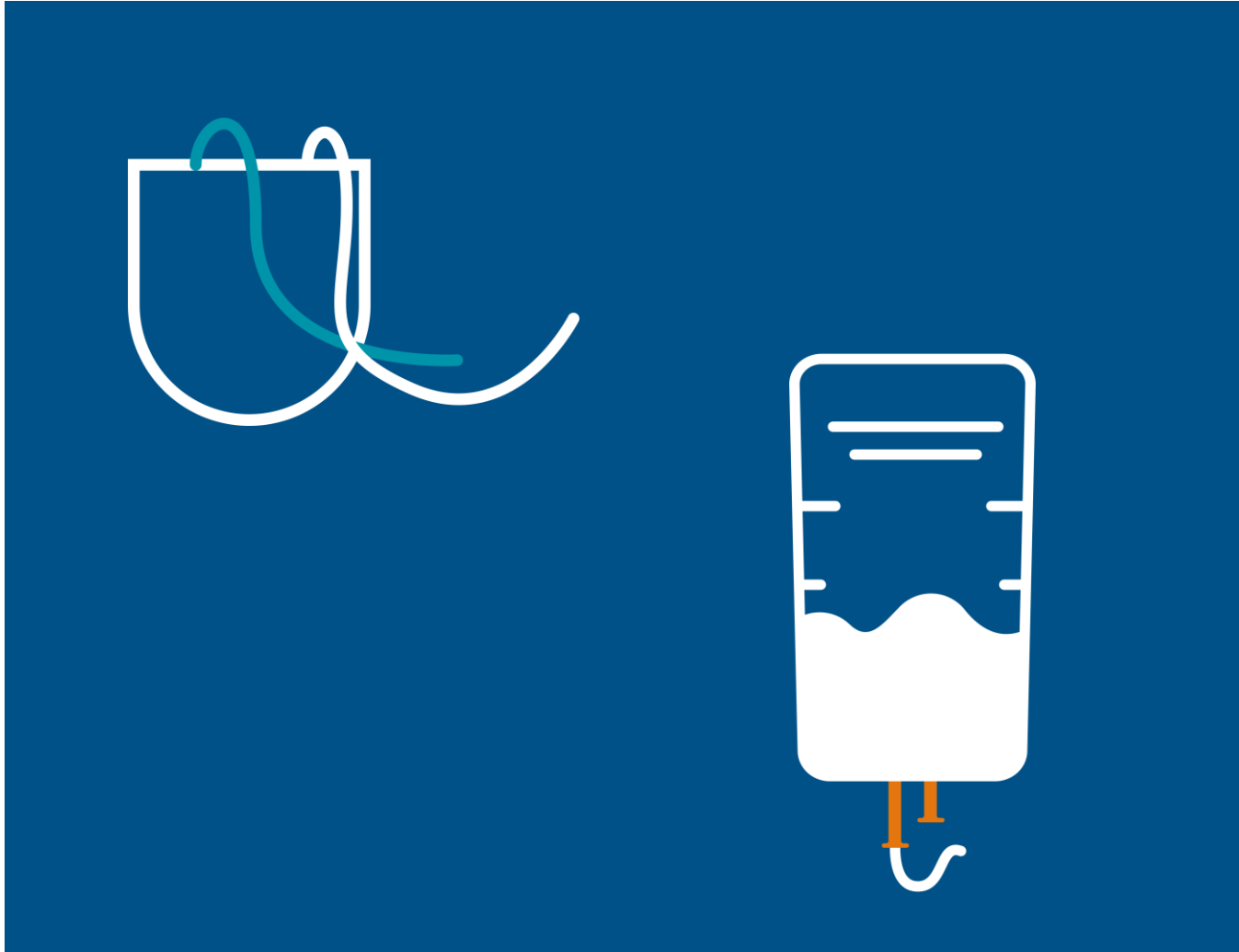
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Back-up

Sequana Medical NV

- Founded in 2006
- Gent, Belgium (HQ): corporate, clinical, commercial
- Zurich, Switzerland: manufacturing, engineering, QA/RA
- >60 employees
- Euronext Brussels: SEQUA



Strong organisation

Highly experienced leadership team supported by committed and well-reputed shareholders

Executive team:



Ian Crosbie
Chief Executive Officer



Kirsten Van Bockstaele
Chief Financial Officer



Oliver Gødje
Chief Medical Officer



Dragomir Lakic
VP Manufacturing



Gijs Klarenbeek
Senior Medical Advisor



Martijn Blom
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Doug Kohrs
Director

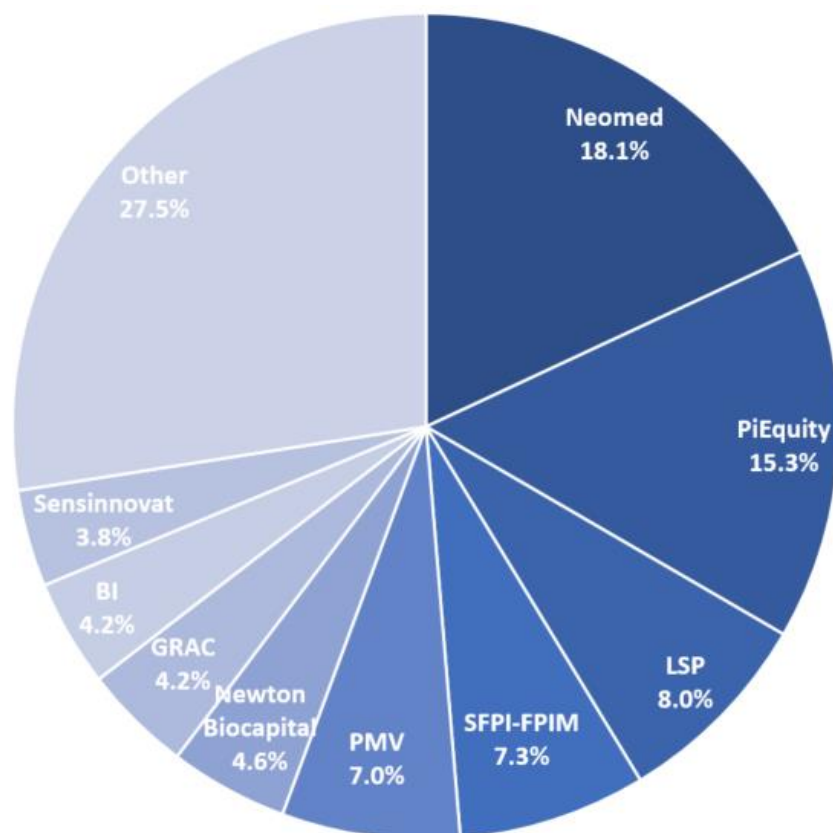


Alex Clyde
Director

Shareholders base and financial overview

Ticker: SEQUA – Euronext Brussels

- Outstanding shares: 23.7M
- Outstanding shares corresponding to outstanding share options & : 2.7M



- Analysts:
 - KBC Securities – Jeroen Van den Bossche
 - Kempen – Suzanne van Voorthuizen
 - H.C. Wainwright – Yi Chen, Raghuram Selvaraju
 - Degroof Petercam – Laura Roba, Kris Kippers
- Cash (30 June 2022): €23.8M
- Loan facility with Kreos Capital (July 2022): €10M
- Cash runway into Q3 2023



POSEIDON – study cohorts

Patients with recurrent or refractory ascites due to liver cirrhosis in up to 20 centres across US and Canada

Two study cohorts with the same inclusion / exclusion criteria

1 Pivotal Cohort

- Up to 50 patients implanted with the **alfapump**®
- For primary and secondary endpoint analysis

2 Roll-In Cohort ➡ enables us to report interim data

- Up to 30 patients implanted with the **alfapump**
- To teach clinicians and medical teams at new centres how to use the **alfapump**



Recurrent or refractory ascites – patient profile

26 patients from the Roll-In Cohort in the POSEIDON study

Age (mean)	63 y
MELD score (mean \pm SD)	10.3 \pm 3.9
Cirrhosis etiology	
- Alcohol	- 50.0%
- NASH	- 23.1%
- NASH / Alcohol	- 3.8%
- Alcohol / Hepatitis	- 11.5%
- Alcohol / Primary Sclerosing Cholangitis	- 3.8%
- Hepatitis C	- 3.8%
- Budd Chiari Syndrome	- 3.8%
TP per month prior to study (mean \pm SD)	3.8 \pm 1.4

N. American patients are treated early in their disease

NASH is becoming a major driver of ascites market

Higher number of TP compared to Europe



Roll-In Cohort: Substantial and durable reduction in Therapeutic Paracentesis (TP)

Mean values	Primary efficacy endpoint Pivotal Cohort	Interim data Roll-In Cohort (N = 26)
% reduction in monthly frequency of TP	> 50% ⁽¹⁾	> 90% ⁽²⁾
% patients with >50% reduction in TP	> 50% ⁽¹⁾	100% ⁽²⁾

(1) Monthly frequency of TP during 3-month post-implant observation period (month 4 to 6) vs 3-month pre-implant observation period

(2) Monthly frequency of TP during period up to 12 months post-implant vs one month prior to implant (medical history)

Substantial reduction in TP well beyond 6 months post-implantation with alfapump[®]

* Note: Pre- and post-implant periods for this analysis of the Roll-In Cohort differ from those that will be used for the Pivotal Cohort analysis

TP: Therapeutic Paracentesis



Roll-In Cohort: Safety in line with expectations

Primary safety endpoint:

- Rate of **alfapump** related re-interventions adjudicated by Clinical Events Committee (CEC)

Interim data Roll-In Cohort (N=26):

- No unanticipated adverse device effects
- Three patients experienced a **composite primary safety event** as adjudicated by CEC:
 - Hematuria after car accident – **alfapump** explant 1 in 1 patient
 - Wound dehiscence – **alfapump** explant 1 in 1 patient
 - Arterial injury during implantation – patient died 1 in 1 patient

“Safety data reassuring for the potential of the alfapump as a long-term treatment in this fragile patient population” – Prof. Wong, Principal Investigator POSEIDON

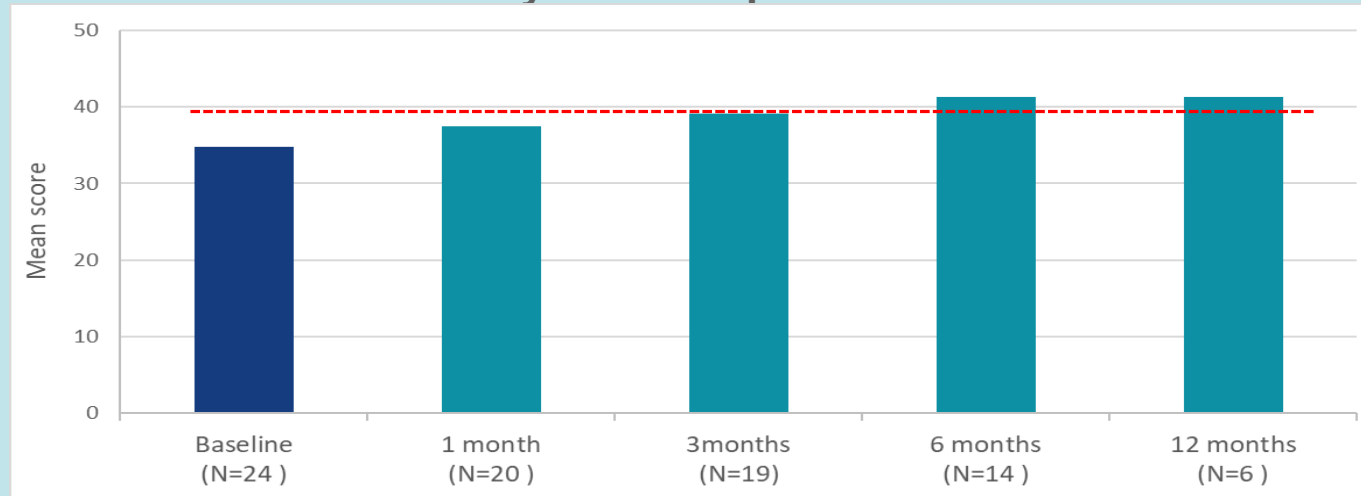


Roll-In Cohort: Clinically important improvement in quality of life maintained up to 12 months

SF-36

*General health-
survey
questionnaire*

Physical Component Score



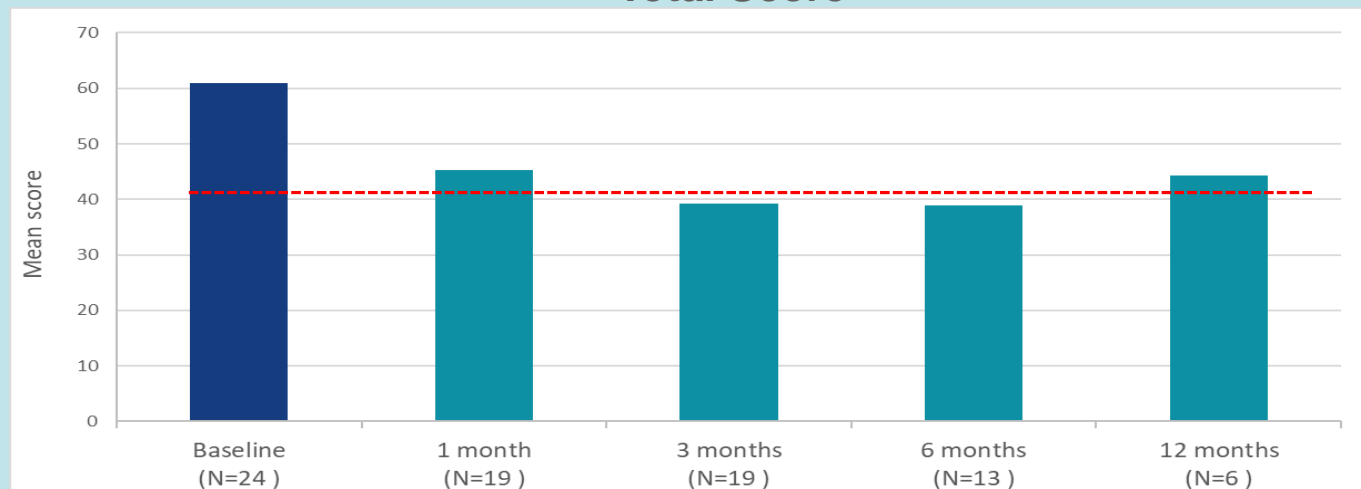
Higher is
better



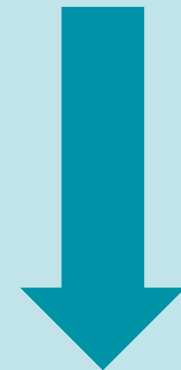
Ascites Q

*Specific health-
survey
questionnaire
for ascites*

Total Score



Lower is
better



* Clinically important improvement: exceeding the threshold for Minimal Clinically Important Difference



Leading experts as Heart Failure Scientific Advisors



Dr. Maria Rosa Costanzo

Medical Director of the Edward Center for Advanced Heart Failure
Medical Director Heart Failure Research for the Advocate Heart Institute



Dr. Wilson Tang

Professor of Medicine at Cleveland Clinic Lerner College of Medicine at Case Western Reserve University



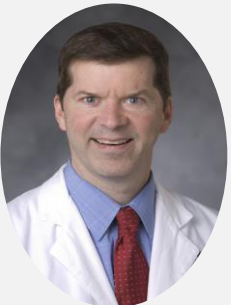
Dr. Javed Butler

Professor and Chairman of the Department of Medicine at the University of Mississippi Medical Center



Dr. Jeffrey Testani

Associate Professor of Medicine and Director of Heart Failure Research at Yale University School of Medicine



Dr. Michael Felker

Professor of Medicine in the Division of Cardiology at Duke University School of Medicine
Director of Cardiovascular Research at the Duke Clinical Research Institute and Vice-Chief for Clinical Research in the Division of Cardiology



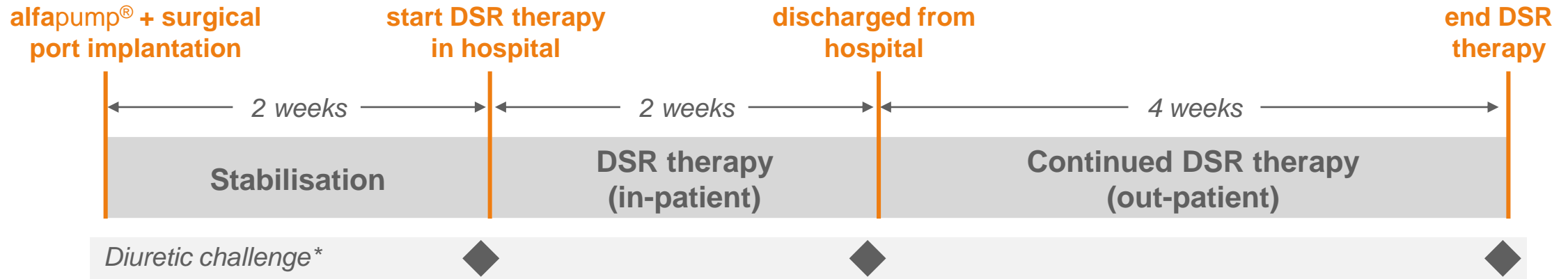
Dr. Udelson

Chief of the Division of Cardiology at Tufts Medical Center
Professor of Medicine and Radiology at Tufts University School of Medicine



RED DESERT – The first repeated DSR[®] therapy study

Repeated dose proof-of-concept study of alfapump DSR[®] in stable heart failure patients on high dose diuretics



Study Endpoints

- **Primary:** absence/rate of device, procedure and/or therapy related serious adverse events
- **Secondary:** ability of the **alfapump** DSR to maintain a neutral sodium balance in the absence of diuretic therapy and the sustained effect of DSR to maintain euvolemia
- **Exploratory:** impact of DSR to restore response to diuretics following DSR treatment

* 40mg intravenous furosemide to evaluate diuretic response (6 hour sodium and fluid excretion)



RED DESERT: Highly effective management of fluid & sodium

No loop diuretics required during study despite mean baseline dose of >300 mg/day furosemide equivalents

Subject	Ejection Fraction (%)	NT-proBNP (pg/mL)	Daily Dose of loop diuretics (mg)**	
	At baseline	At baseline	At baseline	During DSR Treatment (D0 - 42)
101-001	26	6,110	80	0
101-002	27	2,863	200	0
101-003	28	1,536	400	0
101-005	25	1,628	120	0
101-006*	23	1,963	80	0
101-007*	26	5,927	300	0
101-008*	20	7,853	600	0
101-009†	20	8,831	800	0
Mean (± SD)	24 ± 3	4,589 ± 2,945	323 ± 263	

Study recruited severely ill heart failure patients on very high doses of oral loop diuretics

* in follow-up extension with DSR; † subject 101-009 died at D3

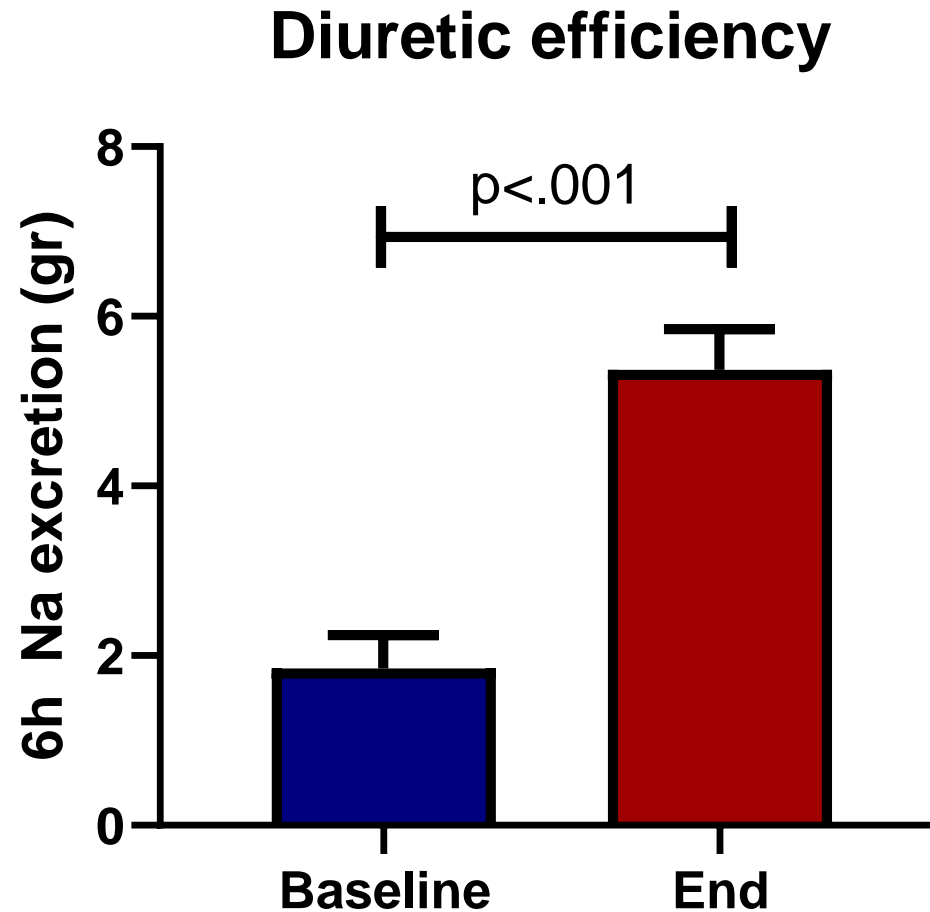
** loop diuretics in furosemide equivalents (mg)

NT-proBNP: N-terminal-pro hormone B-type Natriuretic Peptide – analysed in local lab



RED DESERT: Dramatic improvement in diuretic efficiency

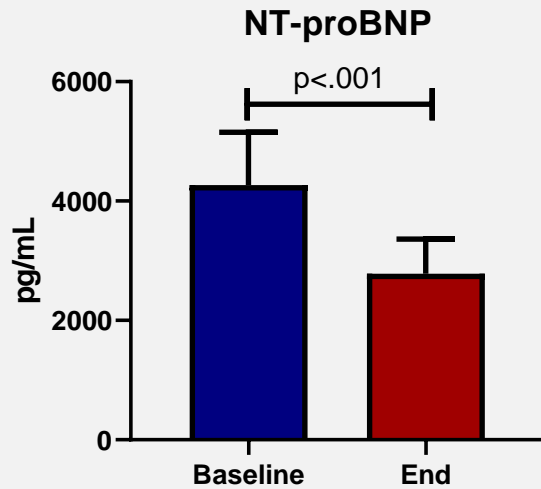
Over 150% increase in mean diuretic response*



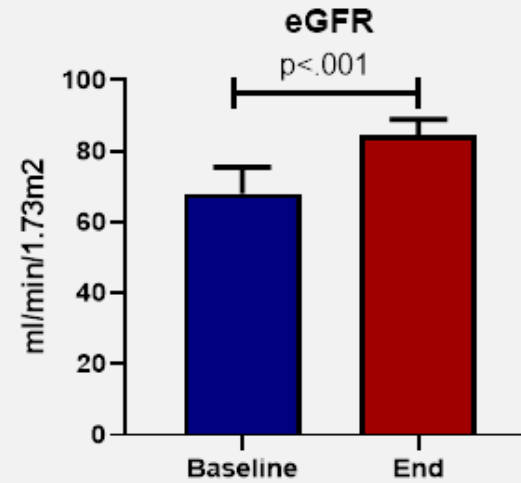
* 6 hour Na excretion following administration of 40mg intravenous furosemide; paired statistical analysis of patients with baseline and D42 value (N=7)



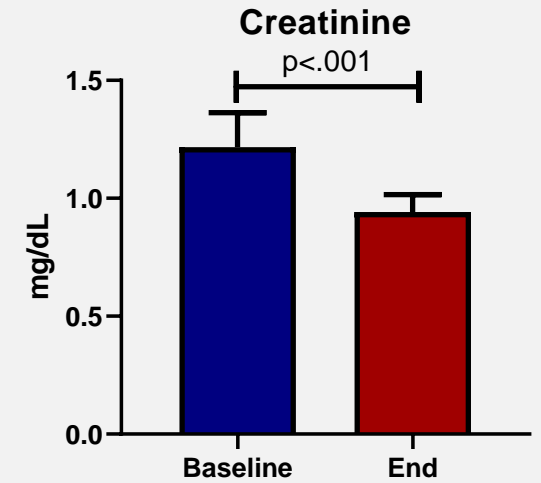
RED DESERT: Significant improvement in cardio-renal function*



**30% decrease
in mean natriuretic peptides**



**22% increase
in mean eGFR**



**22% decrease
in mean creatinine**

“The simultaneous normalisation of diuretic response and improvement in cardio-renal status of the RED DESERT patients is a never before seen treatment effect and could translate into important long-term clinical benefits in heart failure patients” – Dr. Testani

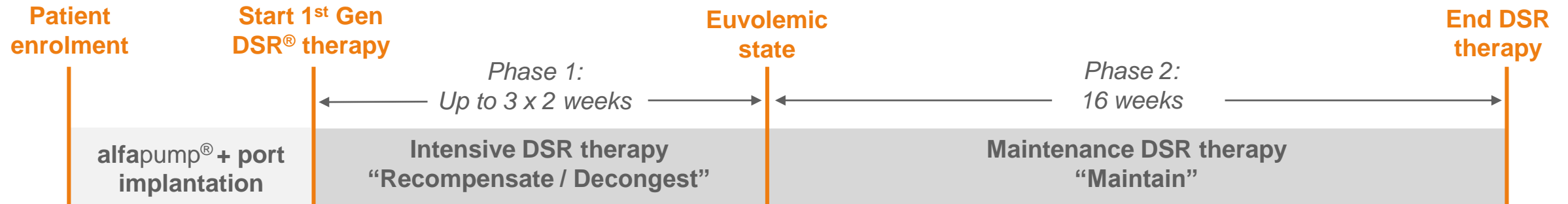
* Paired statistical analysis of patients with baseline and D42 value (N=7)

NT-proBNP: N-terminal-pro hormone B-type Natriuretic Peptide (analysed in local lab); **eGFR:** estimated glomerular filtration rate



SAHARA: Ph. 2a in target patient population

Decompensated heart failure patients with persistent congestion on high dose diuretics – ongoing



Study Endpoints

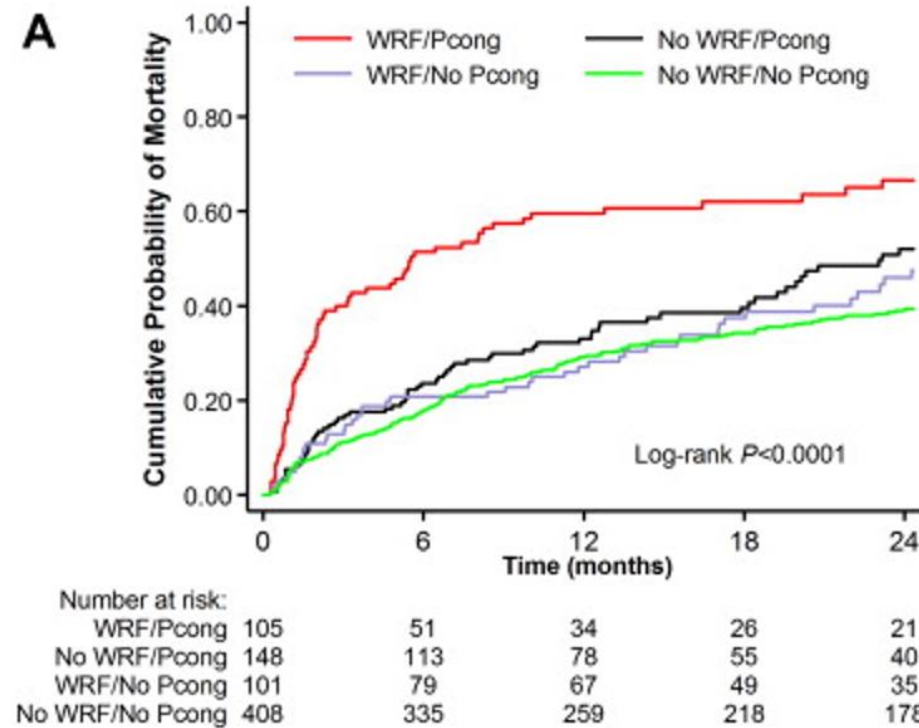
- **Primary:** safety and tolerability of **alfapump** DSR® therapy
- **Secondary:** feasibility of DSR therapy to restore and maintain euvolemia without additional loop diuretics
- **Exploratory:** evaluate potential impact of SGLT-2 inhibitors on DSR therapy*

* patients will be randomised 1:1 to DSR therapy +/- SGLT-2 inhibitor therapy



Persistent congestion and Worsening renal function

Persistent congestion and worsening renal function are key targets in decompensated heart failure



Wattad et al, American Journal of Cardiology, 2015: interaction between worsening renal function and persistent congestion in acute decompensated heart failure (study of 762 patients)

Evaluating potential for DSR® in renal failure

Complementary opportunity leveraging heart failure programme capabilities

- Like heart failure, **kidney failure / dialysis** is one of the leading burdens for healthcare systems and carries a high mortality / morbidity burden
- Hemodialysis seeks to tackle two different challenges – removal of uremic toxins as well as managing the sodium and fluid balance – creating **clinical and economic challenges**
- **DSR therapy** has the potential to **more effectively manage the fluid and sodium balance** of this large patient group
 - ⇒ Leveraging all of our experience from congestion / fluid overload in heart failure
- We are **exploring the potential of DSR** in this large and important patient group, potentially reducing hospitalisations, the cost and burden of hemodialysis therapy as well as mortality
 - ⇒ **Supporting work of Dr McIntyre** (Lawson Health Research Institute, Ontario, Canada): evaluating the use of DSR therapy in effective volume management and sodium removal in prevalent hemodialysis patients (NCT04603014)