PRESS RELEASE
REGULATED INFORMATION – INSIDE INFORMATION
7 December 2021, 07:00 am CET

Sequana Medical announces positive interim results of SAHARA DESERT, the alfapump DSR® study in heart failure patients with persistent congestion

- **Interim data from six patients indicate that alfapump DSR therapy can:**
  - **safely, effectively and rapidly eliminate persistent congestion and restore euvolemia in diuretic-resistant heart failure patients,**
  - **considerably benefit cardio-renal status, and**
  - **dramatically improve diuretic responsiveness for months post-treatment**
- **Recruitment on-track to report top-line data in H2 2022**
- **Long-term follow-up of RED DESERT patients shows durable improvement in diuretic response following alfapump DSR therapy**
- **Proprietary DSR Infusate 2.0 development on track to start MOJAVE DESERT in H2 2022**

Conference call with live webcast presentation today at 03:00 pm CET / 09:00 am ET

Ghent, Belgium – 7 December 2021 – Sequana Medical NV (Euronext Brussels: SEQUA, the "Company" or Sequana Medical), an innovator in the treatment of diuretic-resistant fluid overload in liver disease, malignant ascites and heart failure, today announces positive interim results from six patients in SAHARA DESERT, the safety and feasibility study of **alfa**pump DSR (Direct Sodium Removal) in heart failure patients with persistent congestion.

Ian Crosbie, Chief Executive Officer at Sequana Medical, commented: "We are extremely pleased with these interim results from SAHARA DESERT which, for the first time, indicate the ability of repeated DSR therapy to safely, effectively and rapidly eliminate persistent congestion in decompensated heart failure patients. Just as we showed in RED DESERT, we are able to achieve this, together with a major improvement in patients' diuretic-response. It is promising to see the improved cardio-renal status of these patients compared to the status expected for patients undergoing volume removal. We look forward to the completion of enrolment to report on top-line data and the planned commencement of MOJAVE DESERT, our first U.S. DSR study, in H2 2022. The long-term follow-up data from our RED DESERT patients is very encouraging, indicating the sustained improvement in diuretic response as demonstrated by a clear reduction in the need for loop diuretics. This further indicates how powerful and versatile our **alfa**pump DSR platform is and how it can address clear unmet medical needs within this large and growing patient population."

Strong interim results from SAHARA DESERT

All six patients evaluated for the interim analysis had severe heart failure at baseline (mean left ventricle ejection fraction percentage in low 20's and mean NT-proBNP of > 6,000 pg/ml), with persistent congestion despite being on high dose loop diuretics (mean furosemide equivalent dose of approx. 250 mg per day). Out

of the six patients in the interim analysis, one patient had completed phase 2 of the study, three patients were in phase 2 and two patients were in phase 1.

After intensive **alfa**pump DSR therapy in phase 1, patients had a mean weight loss of approx. 6kg or 7% of their body weight vs. baseline and all patients achieved euvolemia without the need of any loop diuretics. These interim data also showed a near normalisation of diuretic response with six-hour excretion of sodium more than doubling vs. baseline, as well as an improvement in NT-proBNP, a key cardiac function parameter, with a mean reduction of more than 30% vs. baseline. The mean eGFR (estimated Glomerular Filtration Rate) and creatinine after completion of phase 1 (active fluid removal) was similar to baseline, which is remarkable since worsening in kidney function during significant volume removal is the expectation in severely ill diuretic-resistant patients such as these. Patients who completed phase 1 are at less than 10% of their baseline loop diuretic dose (n=4, mean time post end of phase 1 is three months).

Serial **alfa**pump DSR therapy was safe and well tolerated with few adverse events and there were no clinically significant changes in serum sodium levels or other electrolytes observed in these six patients after intensive DSR therapy.

To date, nine patients have been enrolled at two centers in SAHARA DESERT and implanted with the **alfa**pump DSR system, of which six patients were evaluated for this interim analysis and two more patients just started study treatment. One additional patient was enrolled but died due to a cardiac arrest three days after study initiation. The death was deemed by the site unrelated to the study therapy, procedure or device; the Data Monitoring Committee assessed the event as possibly related to the study therapy but not related to the procedure or device. Patient enrollment continues as planned and reporting of top-line data is expected in H2 2022.

Dr. Jeffrey Testani, Associate Professor at Yale University and Heart Failure Scientific Advisor of Sequana Medical, commented: "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. We are looking forward to completing the study and presenting the top-line data of all patients by the end of next year."

Dr. Oliver Gödje, Chief Medical Officer at Sequana Medical, added: "SAHARA DESERT represents the continuing development of our **alfa**pump DSR therapy, and the interim results are a further indication of its unique capabilities. Our RED DESERT study showed that **alfa**pump DSR could improve the diuretic response and cardio-renal status in patients with diuretic-resistant heart failure. SAHARA DESERT is building on these strong results as we focus on our anticipated patient population, those heart failure patients with persistent congestion, for whom oral diuretics is no longer effective at preventing fluid overload, a patient population particularly difficult to manage by healthcare professionals and where **alfa**pump DSR could offer a real change in the treatment paradigm."

Long-term follow-up of RED DESERT patients demonstrates sustained improvement of diuretic response

In May 2021, Sequana Medical reported strong top-line results of RED DESERT (NCT04116034) in seven euvolemic heart failure patients on high dose diuretics. Following the six-week study, patients continued to be followed for up to 19 months. One patient died nine months after the end of the study (unrelated to DSR

therapy). All patients had a reduction in their oral loop diuretic dose ranging from 40% to 96% at their last visit within the follow-up period (9-19 months after last DSR treatment in the study), showing a significant durability to the improvement in diuretic responsiveness following **alfa**pump DSR therapy.

Strong progress in development of proprietary DSR Infusate 2.0

A key element of Sequana Medical's DSR programme is the development of the proprietary DSR Infusate 2.0, to deliver an infusate with a superior therapeutic profile as well as a high margin recurring revenue stream to accompany **alfa**pump sales. Chemistry, Manufacturing and Controls (CMC) of DSR Infusate 2.0 is progressing well and pre-clinical development work is on track. The MOJAVE DESERT study, the first U.S. study of short-term DSR therapy in chronic heart failure patients with persistent congestion, is planned to start in H2 2022.

Conference Call and Webcast

Sequana Medical will host a conference call with live webcast presentation today at 03:00 pm CET / 09:00 am ET.

- Registration webcast: please click here
- Registration conference call (only if you wish to participate in the Q&A): please click here. Once registered, you will receive dial-in numbers and a confirmation code.

The webcast and conference call will be conducted in English and a replay will be available on Sequana Medical's website shortly after.

For more information, please contact:

Sequana Medical

Lies Vanneste
Director Investor Relations
Tel: +32 498 05 35 79
Email: IR@sequanamedical.com

LifeSci Advisors

Guillaume van Renterghem
Tel: +41 76 735 01 31
Email: gvanrenterghem@lifesciadvisors.com

About SAHARA DESERT – alfapump DSR study in decompensated heart failure patients

SAHARA DESERT is a multi-centre, prospective, randomised, open-label study to evaluate the safety and feasibility of **alfa**pump DSR® therapy in heart failure patients with persistent congestion and resistance to loop diuretic treatment. Twenty patients will be implanted with the **alfa**pump DSR system. Following **alfa**pump DSR

implantation, patients undergo a diuretic challenge to quantify their response to diuretics, which is repeated at specific time points throughout the study. At the start of the study treatment period, loop diuretics are withheld, and patients are randomised 1:1 to DSR therapy with or without SGLT2-inhibitor to evaluate their impact on DSR therapy. Patients undergo intensive DSR therapy with DSR D10% infusate for two weeks (phase 1) which can be repeated up to two times depending on patients' euvolemic state, diuretic response and stable DSR dosing at the end of phase 1. Patients who have achieved euvolemia and have adequate diuretic response enter the maintenance DSR treatment phase with monthly DSR dosing for 16 weeks (phase 2).

The primary safety and tolerability endpoints include the rate of treatment-, device- or procedure-related serious adverse events through the end of the maintenance phase. Secondary feasibility endpoints include the ability of DSR therapy to restore and maintain euvolemia without the need for additional loop diuretic treatment. Additional exploratory endpoints will evaluate the potential impact of SGLT-2 inhibitors on DSR therapy. The study is being conducted in up to three clinical centres in the Republic of Georgia. For more information about the study, please visit clinicaltrials.gov (NCT04882358).

About alfapump DSR in heart failure patients with diuretic-resistant congestion

alfapump DSR® is in clinical development as potential long-term treatment for heart failure patients with diuretic-resistant congestion. Congestion, also known as fluid overload, is the driver of more than 90% of the one million heart failure hospitalisations in the U.S. each year (which in total account for $13 billion in costs). The treatment options are severely limited in those patients for whom diuretics are no longer effective, which is evident from the 24% hospital re-admission rate at 30 days from discharge. Persistent congestion and worsening renal function is a key indicator of increased mortality in acute decompensated heart failure patients.

Sequana Medical's proprietary DSR therapy is a unique approach that removes sodium from the body using diffusion in the peritoneal cavity with the use of a sodium-free solution (the "DSR infusate"). Once the sodium has been removed, the body eliminates excess fluid naturally through osmotic ultrafiltration and urination to restore the serum sodium concentration. **alfa**pump DSR combines DSR therapy with the proven **alfa**pump to deliver a fully implanted system for long-term DSR therapy. Strong top-line results from the RED DESERT study showed that repeated dose **alfa**pump DSR therapy in diuretic-resistant heart failure patients is highly effective at managing the fluid and sodium balance and improves cardio-renal status. Following the six-week study, there was a dramatic improvement in patients' diuretic response and a meaningful long-term reduction in their oral loop diuretic needs.

About Sequana Medical

Sequana Medical is a commercial stage medical device company utilizing its proprietary **alfa**pump® and DSR® (Direct Sodium Removal) technologies to develop innovative treatments for fluid overload in liver disease, malignant ascites and heart failure where diuretics are no longer effective. Fluid overload is a frequent complication of many large diseases - including advanced liver disease driven by NASH (non-alcoholic steatohepatitis)-related cirrhosis and heart failure - with diuretic resistance being widespread. The U.S. market

for the **alfa**pump resulting from NASH-related cirrhosis is forecast to exceed €3 billion annually within the next 10-20 years. The heart failure market for DSR and the **alfa**pump DSR® is estimated to be over €5 billion annually in the U.S. and EU5 by 2026.

The **alfa**pump is Sequana Medical's unique, fully implanted wireless device that automatically pumps fluid from the abdominal cavity into the bladder, where it is naturally eliminated through urination. DSR is Sequana Medical's proprietary approach to managing sodium and fluid overload through use of a sodium-free infusate administered into the abdominal cavity.

In the U.S., the Company's key growth market, the **alfa**pump has been granted breakthrough device designation by the FDA for recurrent or refractory ascites due to liver cirrhosis. Interim data from the ongoing North American pivotal study (POSEIDON) showed positive outcomes against all primary endpoints of the study and a rapid and persistent clinically important improvement in quality of life. This study is intended to support a future marketing application of the **alfa**pump in the U.S. and Canada. Completion of enrolment was announced in December 2021 and the primary endpoint reporting is planned for Q4 2022. In Europe, the **alfa**pump is CE-marked for the management of refractory ascites due to liver cirrhosis and malignant ascites and is included in key clinical practice guidelines. Over 900 **alfa**pump systems have been implanted to date.

Sequana Medical has combined its proven **alfa**pump and proprietary DSR therapy, and is developing the **alfa**pump DSR, a breakthrough approach to fluid overload due to heart failure. RED DESERT demonstrated that repeated DSR therapy in diuretic-resistant heart failure patients is able to not only manage the fluid and sodium balance of these patients but also restore their diuretic response and improve their cardio-renal status. The SAHARA DESERT study of **alfa**pump DSR in decompensated heart failure patients is ongoing.

Sequana Medical is headquartered in Ghent, Belgium. For further information, please visit www.sequanamedical.com.

Important Regulatory Disclaimers

*The **alfa**pump® system is not currently approved in the United States or Canada. In the United States and Canada, the **alfa**pump® 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 see www.poseidonstudy.com. The DSR® therapy is still in 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. The DSR® therapy is not currently approved for clinical research in the United States or Canada. There is no link between the DSR® therapy and ongoing investigations with the **alfa**pump® system in Europe, the United States or Canada.*

***Note: alfa**pump® is a registered trademark. DSR® and **alfa**pump DSR® are registered trademarks in the Benelux, China, the EU, United Kingdom, and Hong Kong.*

Forward-looking statements

This press release may contain predictions, estimates or other information that might be considered forward-

looking statements. Such forward-looking statements are not guarantees of future performance. These forward-looking statements represent the current judgment of Sequana Medical on what the future holds, and are subject to risks and uncertainties that could cause actual results to differ materially. Sequana Medical expressly disclaims any obligation or undertaking to release any updates or revisions to any forward-looking statements in this press release, except if specifically required to do so by law or regulation. You should not place undue reliance on forward-looking statements, which reflect the opinions of Sequana Medical only as of the date of this press release.