VIFOR FRESENIUS MEDICAL CARE RENAL PHARMA (VFMCRP), A JOINT COMPANY OF VIFOR PHARMA GROUP AND FRESENIUS MEDICAL CARE, ANNOUNCED TODAY THAT IT ENTERED INTO A DEVELOPMENT AND LICENSING AGREEMENT WITH US BIOPHARMACEUTICAL, CARA THERAPEUTICS, INC, TO COMMERCIALISE CR845 (DIFELIKEFALIN) INJECTION FOR THE TREATMENT OF CHRONIC KIDNEY DISEASE-ASSOCIATED PRURITUS (CKD-aP) IN HEMODYALYSIS PATIENTS WORLDWIDE, EXCLUDING THE US, JAPAN AND SOUTH KOREA.

“CR845 injection is a first-in-class, innovative investigational medicine for treating a highly debilitating disease. It is a natural fit to our leading product portfolio in nephrology, and we look forward to making it available to patients who urgently need better therapy,” said Stefan Schulze, Vifor Pharma President of the Executive Committee and COO. “Sixty to 70% of dialysis patients experience CKD-aP. Nearly 20% suffer from a very severe form, which is associated with much lower survival. And despite this clear unmet medical need, there is no approved treatment for CKD-aP in Europe or the US. CR845 injection does not penetrate the brain and so bypasses unwanted side-effects like opioid addiction. It has significant potential for setting new standards in providing relief, both from CKD-aP-induced itching and post-operative pain.”

CR845 injection is a potent itch and inflammation suppressant without the undesirable side-effects typical of an opioid medicine such as hallucination or opioid addiction. This investigational medicine was designated a breakthrough therapy for CKD-aP in haemodialysis patients by the FDA in June 2017 and shows compelling phase-II data on safety and efficacy. If approved, CR845 injection will be the first medicine for this indication outside of Japan.
VFMCRP has also secured the first right of negotiation for using CR845 injection to treat post-operative pain outside of the US, Japan and South Korea, for which a phase-III development programme began in September 2015.

Under the terms of the agreement, Cara will receive an upfront payment of USD 50 million in cash and equity investment of USD 20 million to acquire Cara common stock. Cara will also be eligible to receive additional payments upon achievement of certain regulatory and commercial milestones, as well as tiered royalties on net sales of CR845 injection for CKD-aP in the licensed territories.

Cara retains development and commercialisation rights for CR845 injection for the treatment of CKD-aP in the US. Cara will solely promote the product in all non-FMC clinics in the US. VFMCRP and Cara will promote the investigational medicine to FMCNA (Fresenius Medical Care North America) dialysis clinics under a profit-sharing arrangement.

**FURTHER INFORMATION**

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**Vifor Pharma Group**, formerly **Galenica Group**, is a global pharmaceuticals company. It aims to become the global leader in iron deficiency, nephrology and cardio-renal therapies. The company is the partner of choice for pharmaceuticals and innovative patient-focused solutions. Vifor Pharma Group strives to help patients around the world with severe and chronic diseases lead better, healthier lives. The company develops, manufactures and markets pharmaceutical products for precision patient care. Vifor Pharma Group holds a leading position in all its core business activities and consists of the following companies: Vifor Pharma; Vifor Fresenius Medical Care Renal Pharma, a joint company with Fresenius Medical Care; Relypsa; and OM Pharma. Vifor Pharma Group is headquartered in Switzerland, and listed on the Swiss Stock Exchange (SIX Swiss Exchange, VIFN, ISIN: CH0364749348). For more information, please visit [www.viforpharma.com](http://www.viforpharma.com).

**Vifor Fresenius Medical Care Renal Pharma Ltd.**, is a joint company of Vifor Pharma Group and Fresenius Medical Care, develops and commercialises innovative and high quality therapies to improve the life of patients suffering from chronic kidney disease (CKD) worldwide. The company was founded at the end of 2010 and is owned 55% by Vifor Pharma Group and 45% by Fresenius Medical Care. For more information about Vifor Fresenius Medical Care Renal Pharma and its parent companies, please visit [www.vfmcrp.com](http://www.vfmcrp.com), [www.viforpharma.com](http://www.viforpharma.com) and [www.freseniusmedicalcare.com](http://www.freseniusmedicalcare.com).

**Cara Therapeutics** is a clinical-stage biopharmaceutical company focused on developing and commercialising new chemical entities designed to alleviate pruritus and pain by selectively targeting peripheral kappa opioid receptors (KORs). Cara is developing a novel and proprietary class of product candidates, led by Korsuva™ (CR845/difelikefalin), a first-in-class KOR agonist that targets the body's peripheral nervous system. In phase-II trials, Korsuva™ injection has demonstrated statistically significant reductions in itch intensity and concomitant improvement in quality of life measures in haemodialysis patients with moderate-to-severe CKD-aP and is currently being investigated in phase-III trials in haemodialysis patients with CKD-aP. Additionally, CR845/difelikefalin has also demonstrated efficacy in patients with moderate-to-severe pain, without inducing many of the undesirable side effects typically associated with currently available opioid pain therapeutics.
Chronic kidney disease-associated pruritus (CKD-aP) is an intractable systemic itch condition that occurs with high frequency and intensity in both dialysis and non-dialysis CKD patients. About 60-70% of CKD patients on dialysis report pruritus; of these, 30-40% experience moderate to severe pruritus\(^1,2\). Nearly 60% of CKD-aP patients experience symptoms almost every day for months or years, even when using antihistamines and corticosteroids. Chronic pruritus directly decreases quality of life and contributes to symptoms that impair quality of life\(^3\); the disease is also associated with depression\(^3\). CKD-aP is an independent predictor of mortality related to increased risk of inflammation and infections in haemodialysis patients\(^4\).

**CR845** (difelikefalin) is a peripherally acting kappa opioid receptor (KOR) agonist currently in development for the treatment of pruritus and pain. CR845 has demonstrated both anti-itch and anti-inflammatory properties in pre-clinical and clinical trials. In more than 1,200 patients, who received CR845 either intravenously or orally, CR845 was observed to be well-tolerated, without the dysphoric and psychotomimetic side effects that have been reported with centrally acting (CNS-active) kappa opioid receptor agonists and without the respiratory depression and abuse liability of mu opioid receptor agonists. The FDA conditionally accepted Korsuva™ as the trade name for CR845 injection in the US. CR845 is an investigational drug product, and its safety and efficacy have not been fully evaluated by any regulatory authority.

**References:**