

Recro Pharma, Inc.  
Form 424B3  
February 01, 2016

**Filed Pursuant to Rule 424(b)(3)  
Registration Statement No. 333-201841**

**Prospectus Supplement No. 2**

**to Prospectus dated January 11, 2016**

**2,500,000 Shares**

**Common Stock**

This Prospectus Supplement No. 2 supplements and amends our prospectus dated January 11, 2016 (the Prospectus ), relating to the sale, from time to time, of up to 2,500,000 shares of our common stock by Aspire Capital Fund, LLC.

This prospectus supplement is being filed to include the information set forth in our Current Report on Form 8-K filed with the Securities and Exchange Commission on February 1, 2016. This prospectus supplement should be read in conjunction with the Prospectus and any amendments or supplements thereto, which are to be delivered with this prospectus supplement, and is qualified by reference to the Prospectus, except to the extent that the information in this prospectus supplement updates or supersedes the information contained in the Prospectus, including any amendments or supplements thereto.

Our common stock trades on the NASDAQ Capital Market under the ticker symbol REPH. On January 29, 2016, the last reported sale price per share of our common stock was \$7.83 per share.

**Investing in our common stock involves risk. Please read carefully the section entitled Risk Factors beginning on page 8 of the Prospectus.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved these securities or determined if the Prospectus or this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.**

**The date of this Prospectus Supplement No. 2 is February 1, 2016.**

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**FORM 8 K**

**CURRENT REPORT**

**Pursuant to Section 13 OR 15 (d)**  
**of the Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported): February 1, 2016**

**Recro Pharma, Inc.**

**(Exact name of registrant as specified in its charter)**

**Pennsylvania**  
**(State or other jurisdiction**  
  
**of incorporation)**

**001-36329**  
**(Commission**  
  
**File Number)**

**26-1523233**  
**(I.R.S. Employer**  
  
**Identification No.)**

**490 Lapp Road,**

**19355**

**Malvern, Pennsylvania**  
**(Address of principal executive offices)** **(Zip Code)**  
**Registrant's telephone number, including area code: (484) 395 2470**

**Not Applicable**

**(Former name or former address, if changed since last report.)**

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- .. Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- .. Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- .. Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- .. Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**Item 8.01 Other Events.**

On February 1, 2016, Recro Pharma, Inc. (the Company ) issued a press release announcing that the first patient was dosed in the pivotal Phase III clinical trial evaluating intravenous meloxicam (N1539) for acute postoperative pain in patients following bunionectomy surgery. A copy of the press release is filed as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

**Item 9.01 Financial Statements and Exhibits.**

**(d) Exhibits**

| Exhibit<br>No. | Document   |
|----------------|--|
| 99.1           | Press release of Recro Pharma, Inc., dated February 1, 2016. |

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: February 1, 2016

Recro Pharma, Inc.

By: /s/ Gerri A. Henwood

*Name: Gerri A. Henwood*

*Title: Chief Executive Officer*

**EXHIBIT INDEX**

| Exhibit | No. | Document   |
|---------|-----|--|
| 99.1    |     | Press release of Recro Pharma, Inc., dated February 1, 2016. |

## **Recro Pharma Initiates Second Pivotal Phase III Clinical Trial of IV Meloxicam for Acute Postoperative Pain**

MALVERN, PA, February 1, 2016 Recro Pharma, Inc. (Nasdaq: REPH), a revenue generating specialty pharmaceutical company developing multiple non-opioid therapeutics for the treatment of pain, today announced that the first patient was dosed in the pivotal Phase III clinical trial evaluating intravenous (IV) meloxicam (N1539) for acute postoperative pain in patients following bunionectomy surgery.

In this multicenter, randomized, double-blind, placebo-controlled clinical trial, IV meloxicam's efficacy and safety will be evaluated in the management of postoperative pain following bunionectomy surgery, a representative hard tissue surgery. Approximately 200 patients will be assigned randomly to a postoperative regimen of IV meloxicam (30mg) or placebo in a 1:1 ratio, once every 24 hours for up to 3 doses following surgery. The primary efficacy endpoint of this Phase III study is the summed pain intensity difference over the first 48 hours (SPID48) compared to placebo. Recro expects to report top-line results from this Phase III study by year end 2016.

The commencement of this second pivotal Phase III clinical trial marks another key step in the development of IV meloxicam, said Gerri Henwood, Recro Pharma's President and Chief Executive Officer. We now have two ongoing pivotal Phase III trials in both hard and soft tissue models and we expect to report top-line results from both trials by the end of 2016. There is a growing interest in the availability and use of non-opioid pain treatments. There are limited non-opioid pain treatment options available for hospitalized patients recovering from surgery with moderate to severe pain. With IV meloxicam's demonstrated efficacy in multiple Phase II trials, favorable tolerability, and a desirable dosing profile, we believe that IV meloxicam has the potential to be a new and differentiated non-opioid treatment option for patients with moderate to severe pain.

Bunionectomy surgery generally involves an incision in the top or side of the big toe joint and the removal or realignment of soft tissue and bone. This is done to relieve pain and restore normal alignment to the joint. Bunionectomy surgery typically results in intense postoperative pain. In the past, drugs that have demonstrated analgesic effectiveness following bunionectomy surgery have frequently translated that analgesic success into other postoperative procedures that result in moderate to severe, acute pain.

### **About IV/IM Meloxicam**

Meloxicam is a long-acting, preferential COX-2 inhibitor that possesses anti-inflammatory, analgesic, and antipyretic activities, which are believed to be related to the inhibition of cyclooxygenase (COX) and subsequent reduction in prostaglandin biosynthesis. Meloxicam has been marketed by Boehringer Ingelheim Pharmaceuticals, Inc. since the 1990's as an oral agent, Mobic®. IV/IM meloxicam was designed using

NanoCrystal® platform, a technology that enables enhanced bioavailability of poorly water-soluble drug compounds. Recro acquired IV/IM meloxicam from Alkermes in April 2015.

### **About Recro Pharma, Inc.**

Recro Pharma is a revenue generating specialty pharmaceutical company developing multiple non-opioid therapeutics for the treatment of pain. Recro Pharma is currently developing IV/IM meloxicam, a proprietary, long-acting preferential COX-2 inhibitor for treatment of acute postoperative pain, and Dex-IN, a proprietary intranasal formulation of dexmedetomidine, for the treatment of peri-procedural pain. Both compounds have successfully completed Phase II clinical trials. As Recro Pharma's product candidates are not in the opioid class of drugs, the Company believes its candidates would avoid many of the side effects associated with commonly prescribed opioid therapeutics, such as addiction, constipation and respiratory distress, while maintaining analgesic effect.

Recro Pharma also owns and operates an 87,000 square foot, DEA-licensed facility that manufactures five commercial products and receives manufacturing revenues and royalties associated with the sales of these products.

### **Cautionary Statement Regarding Forward Looking Statements**

This press release contains forward-looking statements that involve risks and uncertainties. Such forward looking statements reflect Recro Pharma's expectations about its future performance and opportunities that involve substantial risks and uncertainties. When used herein, the words anticipate, believe, estimate, upcoming, plan, target, in expect and similar expressions, as they relate to Recro Pharma or its management, are intended to identify such forward-looking statements. These forward looking statements are based on information available to Recro Pharma as of the date of this press release and are subject to a number of risks, uncertainties, and other factors that could cause Recro Pharma's performance to differ materially from those expressed in, or implied by, these forward looking statements. Recro Pharma assumes no obligation to update any such forward-looking statements. Factors that could cause Recro Pharma's actual performance to materially differ from those expressed in the forward-looking statements set forth in this press release include, without limitation: results and timing of the clinical trials of IV/IM meloxicam and Dex-IN; the ability to obtain and maintain regulatory approval of IV/IM meloxicam and Dex-IN, and the labeling under any such approval; regulatory developments in the United States and foreign countries; the Company's ability to raise future financing for continued development; the Company's ability to pay its debt; the performance of third-party suppliers and manufacturers; the Company's ability to obtain, maintain and successfully enforce adequate patent and other intellectual property protection; and the successful

commercialization of IV/IM meloxicam and Dex-IN. In addition, the forward looking statements in this press release should be considered together with the risks and uncertainties that may affect Recro Pharma's business and future results included in Recro Pharma's filings with the Securities and Exchange Commission at [www.sec.gov](http://www.sec.gov). Recro Pharma assumes no obligation to update any such forward looking statements.

**CONTACT:**

Argot Partners

Susan Kim

(212) 600-1902

[susan@argotpartners.com](mailto:susan@argotpartners.com)