Eagle Pharmaceuticals Awarded First Prize for Poster to Be Presented at the International Society for Anaesthetic Pharmacology 32nd Annual Meeting

October 4, 2023

-- Study reports on an interim analysis of the pharmacokinetics and pharmacodynamics of remimazolam and a subsequent model-based optimization of the dosing regimen that is being studied in the trial --

-- Prize money to be donated to the University of Groningen Medical Center (“UMCG”) research fund, which supports the work of PhD students --

-- Eagle's BYFAVO® (remimazolam) for injection is approved for sedation in adults undergoing procedures lasting 30 minutes or less --

WOODCLIFF LAKE, N.J., Oct. 04, 2023 (GLOBE NEWSWIRE) -- Eagle Pharmaceuticals, Inc. (Nasdaq: EGRX) (“Eagle” or the “Company”) today announced that its poster, to be presented at the International Society for Anaesthetic Pharmacology (“ISAP”) 32nd Annual Meeting, has been awarded first prize. The presentation, entitled “Pharmacokinetics and pharmacodynamics of remimazolam for procedural sedation in children and adolescents,” summarizes the results of the modeling of the remimazolam pharmacokinetic data by the University of Groningen Medical Center (“UMCG”). The annual ISAP meeting is being held on October 13, 2023, the first day of the American Society of Anesthesiologists (“ASA”) Annual Meeting, in San Francisco, CA.

The model-informed drug development project was conceived by Eagle and executed in collaboration with UMCG to determine the appropriate dosing scheme for remimazolam in pediatric patients, as agreed upon with the U.S. Food and Drug Administration (“FDA”).

“It is an honor to receive first-prize recognition for this important analysis,” stated Valentin Curt, MD, Senior Vice President, Clinical Drug Development and Interim Chief Medical Officer at Eagle Pharmaceuticals. “We are pleased to be part of this dynamic scientific community and grateful for this acknowledgement as we share in the ISAP’s mission to promote the study of anesthetic pharmacology.”

Details of the poster presentation are as follows:

Title: Pharmacokinetics and pharmacodynamics of remimazolam for procedural sedation in children and adolescents
Date: Friday, October 13, 2023
Time: 3:00pm – 4:30pm PT
Location: Hilton Union Square, San Francisco

Remimazolam, a short-acting benzodiazepine, is currently not approved for use in patients under 18 years of age. As part of the pediatric study plan agreed upon with the FDA, a clinical trial was initiated in 2021 to assess the efficacy and safety of IV remimazolam in inducing and maintaining appropriate sedation levels in pediatric patients undergoing diagnostic and/or therapeutic procedures. This poster presentation reports on an interim analysis of the pharmacokinetics and pharmacodynamics of remimazolam and a subsequent model-based optimization of the dosing regimen that was studied in the trial.

Used currently only in adults, Byfavo (remimazolam) is a rapid onset/offset procedural sedative with an established safety and efficacy profile and a broad label.

About BYFAVO® (remimazolam)1 Injection:
Byfavo is a novel benzodiazepine approved by the U.S. Food and Drug Administration in July 2020 for sedation in patients undergoing procedures less than 30 minutes in duration. Esterase metabolism and biotransformation to an inactive metabolite provide unique pharmacokinetic differences compared with other benzodiazepines. In May, the Centers for Medicare & Medicaid Services (“CMS”) established a unique, product-specific billing code for Byfavo (remimazolam for injection), which became effective on July 1, 2023. For more information about Byfavo, visit byfavo.com.

About Eagle Pharmaceuticals, Inc.
Eagle is a fully integrated pharmaceutical company with research and development, clinical, manufacturing and commercial expertise. Eagle is committed to developing innovative medicines that result in meaningful improvements in patients’ lives. Eagle’s commercialized products include PEMFEX®, RYANODEX®, BENDEKA®, BELRAPZO®, TREAKISYM® (Japan), and BYFAVO® and BARHEMSYS® through its wholly owned subsidiary Acacia Pharma Inc. Eagle’s oncology and CNS/metabolic critical care pipeline includes product candidates with the potential to address underserved therapeutic areas across multiple disease states, and the company is focused on developing medicines with the potential to become part of the personalized medicine paradigm in cancer care. Additional information is available on Eagle’s website at www.eagleus.com.

1 https://bynder.acacipharma.com/m/493a8c343b29b22de/original/Byfavo-PJ.pdf

Forward-Looking Statements
This press release contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, and other securities law. Forward-looking statements are statements that are not historical facts. Words and phrases such as “anticipated,” “forward,” “will,” “would,” “could,” “may,” “remain,” “potential,” “prepare,” “expected,” “believe,” “plan,” “near future,” “belief,” “guidance,” and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to, statements with respect to: the Company’s ability to develop innovative medicines that address unmet medical needs; Byfavo’s role as a sedation agent; and Byfavo’s potential development for other indications. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the Company’s control, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking
BYFAVO® (remimazolam) Injection

Indications

BYFAVO is a benzodiazepine indicated for the induction and maintenance of procedural sedation in adults undergoing procedures lasting 30 minutes or less.

Important Safety Information

**WARNING: PERSONNEL AND EQUIPMENT FOR MONITORING AND RESUSCITATION AND RISKS FROM CONCOMITANT USE WITH OPIOID ANALGESICS**

**Personnel and Equipment for Monitoring and Resuscitation**

- Only personnel trained in the administration of procedural sedation, and not involved in the conduct of the diagnostic or therapeutic procedure, should administer BYFAVO.
- Administering personnel must be trained in the detection and management of airway obstruction, hypoventilation, and apnea, including the maintenance of a patent airway, supportive ventilation, and cardiovascular resuscitation.
- BYFAVO has been associated with hypoxia, bradycardia, and hypotension. Continuously monitor vital signs during sedation and during the recovery period.
- Resuscitative drugs, and age- and size-appropriate equipment for bag-valve-mask–assisted ventilation must be immediately available during administration of BYFAVO.

**Risks From Concomitant Use With Opioid Analgesics and Other Sedative-Hypnotics**

Concomitant use of benzodiazepines, including BYFAVO, and opioid analgesics may result in profound sedation, respiratory depression, coma, and death. The sedative effect of intravenous BYFAVO can be accentuated by concomitantly administered CNS depressant medications, including other benzodiazepines and propofol. Continuously monitor patients for respiratory depression and depth of sedation.

**Contraindication**

BYFAVO is contraindicated in patients with a history of severe hypersensitivity reaction to dextran 40 or products containing dextran 40.

**Personnel and Equipment for Monitoring and Resuscitation**

Clinically notable hypoxia, bradycardia, and hypotension were observed in Phase 3 studies of BYFAVO. Continuously monitor vital signs during sedation and through the recovery period. Only personnel trained in the administration of procedural sedation, and not involved in the conduct of the diagnostic or therapeutic procedure, should administer BYFAVO. Administering personnel must be trained in the detection and management of airway obstruction, hypoventilation, and apnea, including the maintenance of a patent airway, supportive ventilation, and cardiovascular resuscitation.

Resuscitative drugs, and age- and size-appropriate equipment for bag-valve-mask–assisted ventilation must be immediately available during administration of BYFAVO. Consider the potential for worsened cardiorespiratory depression prior to using BYFAVO concomitantly with other drugs that have the same potential (e.g., opioid analgesics or other sedative-hypnotics). Administer supplemental oxygen to sedated patients through the
recovery period. A benzodiazepine reversal agent (flumazenil) should be immediately available during administration of BYFAVO.

**Risks From Concomitant Use With Opioid Analgesics and Other Sedative-Hypnotics**

Concomitant use of BYFAVO and opioid analgesics may result in profound sedation, respiratory depression, coma, and death. The sedative effect of IV BYFAVO can be accentuated when administered with other CNS depressant medications (eg, other benzodiazepines and propofol). Titrate the dose of BYFAVO when administered with opioid analgesics and sedative-hypnotics to the desired clinical response. Continuously monitor sedated patients for hypotension, airway obstruction, hypoventilation, apnea, and oxygen desaturation. These cardiorespiratory effects may be more likely to occur in patients with obstructive sleep apnea, the elderly, and ASA-PS class III or IV patients.

**Hypersensitivity Reactions**

BYFAVO contains dextran 40, which can cause hypersensitivity reactions, including rash, urticaria, pruritus, and anaphylaxis. BYFAVO is contraindicated in patients with a history of severe hypersensitivity reaction to dextran 40 or products containing dextran 40.

**Neonatal Sedation**

Use of benzodiazepines during the later stages of pregnancy can result in sedation (respiratory depression, lethargy, hypotonia) in the neonate. Observe newborns for signs of sedation and manage accordingly.

**Pediatric Neurotoxicity**

Published animal studies demonstrate that anesthetic and sedation drugs that block NMDA receptors and/or potentiate GABA activity increase neuronal apoptosis in the developing brain and result in long-term cognitive deficits when used for longer than 3 hours. The clinical significance of this is not clear. However, the window of vulnerability to these changes is believed to correlate with exposures in the third trimester of gestation through the first several months of life but may extend out to approximately 3 years of age in humans.

Anesthetic and sedation drugs are a necessary part of the care of children needing surgery, other procedures, or tests that cannot be delayed, and no specific medications have been shown to be safer than any other. Decisions regarding the timing of any elective procedures requiring anesthesia should take into consideration the benefits of the procedure weighed against the potential risks.

**Adverse Reactions**

The most common adverse reactions reported in >10% of patients (N=630) receiving BYFAVO 5-30 mg (total dose) and undergoing colonoscopy (two studies) or bronchoscopy (one study) were: hypotension, hypertension, diastolic hypertension, systolic hypertension, hypoxia, and diastolic hypotension.

**Use in Specific Populations**

**Pregnancy**

There are no data on the specific effects of BYFAVO on pregnancy. Benzodiazepines cross the placenta and may produce respiratory depression and sedation in neonates. Monitor neonates exposed to benzodiazepines during pregnancy and labor for signs of sedation and respiratory depression.

**Lactation**

Monitor infants exposed to BYFAVO through breast milk for sedation, respiratory depression, and feeding problems. A lactating woman may consider interrupting breastfeeding and pumping and discarding breast milk during treatment and for 5 hours after BYFAVO administration.

**Pediatric Use**

Safety and effectiveness in pediatric patients have not been established. BYFAVO should not be used in patients less than 18 years of age.

**Geriatric Use**

No overall differences in safety or effectiveness were observed between these subjects and younger subjects. However, there is a potential for greater sensitivity (eg, faster onset, oversedation, confusion) in some older individuals. Administer supplemental doses of BYFAVO slowly to achieve the level of sedation required and monitor all patients closely for cardiorespiratory complications.

**Hepatic Impairment**

In patients with severe hepatic impairment, the dose of BYFAVO should be carefully titrated to effect. Depending on the overall status of the patient, lower frequency of supplemental doses may be needed to achieve the level of sedation required for the procedure. All patients should be monitored for sedation-related cardiorespiratory complications.

**Abuse and Dependence**

BYFAVO is a federally controlled substance (CIV) because it contains remimazolam which has the potential for abuse and physical dependence.

[https://bynder.acaciapharma.com/m/403e8c343b2922de/original/Byfavo-PI.pdf](https://bynder.acaciapharma.com/m/403e8c343b2922de/original/Byfavo-PI.pdf)