Helsinn Group Announces Upcoming Presentation of Phase 3b data of NEPA (fosnetupitant / palonosetron) IV at ASCO 2019

- ***The NEPA IV formulation was evaluated for safety in the AC setting.***

Lugano, Switzerland, May 31, 2019 – Helsinn, a Swiss pharmaceutical group focused on building quality cancer care products, today announces that the data on the intravenous (IV) formulation of NEPA (Akynzeo®) will be presented as poster at the American Society of Clinical Oncology (ASCO) Congress in June 2019 on the poster session Symptoms and Survivorship.

NEPA (Akynzeo®) is the first and only 5-HT_3 and NK_1 receptor combination approved for the prevention of chemotherapy induced acute and delayed nausea and vomiting. A single dose of Akynzeo given with dexamethasone has been shown to prevent chemotherapy induced nausea and vomiting for 5 days.

This randomized, multinational, double-blind, stratified (by age and region) Phase 3b study in chemotherapy-naïve patients, evaluated the safety of a single 30-minute infusion of NEPA IV agent (fosnetupitant 235 mg, a neurokinin 1 receptor antagonist (NK_1 RA), and palonosetron 0.25 mg, a serotonin-3 receptor antagonist (5-HT_3 RA)) in breast cancer patients receiving anthracycline/cyclophosphamide (AC) chemotherapy. 402 patients received either NEPA IV (200 patients) or NEPA oral (202 patients), in combination with oral dexamethasone on day 1. Safety was assessed primarily by treatment-emergent adverse events (TEAEs).

The AE profiles were similar for the two treatment groups[1]. No infusion site reactions related to NEPA IV occurred, and no anaphylactic reactions were reported for either formulation. NEPA IV does not require a surfactant, emulsifier, or solubility enhancer, and contains no allergenic excipients.

Lee S. Schwartzberg, Hematology & Oncology, West Cancer Center, Germantown, TN, the author of the study, commented: "These data demonstrate that NEPA IV has a similar safety

1 The most common treatment-related AEs during the entire study were headache (2.5% IV NEPA, 3.4% oral NEPA), dizziness (2.5% in both groups), fatigue (2.0% in both groups) and constipation (2.5% IV NEPA, 1.0% oral NEPA); all other treatment-related AEs occurred in < 2% of patients.

profile to NEPA administered orally. We are encouraged by the similar profiles, and particularly by the lack of infusion site reactions.*"*

Sergio Cantoreggi, Helsinn Group Chief Scientific Officer and Group Head of R&D, added: *"*At Helsinn, our key focus is on the quality of life and well-being of the patients. Tolerability can be a significant concern for intravenously administered antiemetics especially in AC. We look forward to discussing these new NEPA IV safety data at ASCO.*"*

- **Title**: Safety of intravenous (IV) NEPA and oral NEPA for prevention of CINV in patients (pts) with breast cancer (BC) receiving anthracycline/cyclophosphamide (AC) chemotherapy (CT)
- **Author**: L. Schwartzberg, D. Voisin, G. Rizzi, K. Patel, M. Aapro
- **Abstract number**: 11594
- **Session title**: Symptoms and Survivorship
- **Date, time and location**: Monday, June 3, 2019, 1:15 PM-4:15 PM, at Hall A

ASCO 2019 will be held from May 31 to June 4, 2019 in Chicago, US. Further details can be found here: https://www.asco.org/meetings

About Akynzeo® (NEPA)

INDICATION

AKYNZEO® (netupitant 300mg/palonosetron 0.5mg) capsules was approved October 2014 in the United States and is indicated in combination with dexamethasone in adults for the prevention of acute and delayed nausea and vomiting associated with initial and repeat courses of cancer chemotherapy, including, but not limited to, highly emetogenic chemotherapy.

AKYNZEO® (fosnetupitant 235mg/palonosetron 0.25) for injection was approved April 2018 in the United States and is indicated in combination with dexamethasone in adults for the prevention of

acute and delayed nausea and vomiting associated with initial and repeat courses of highly emetogenic cancer chemotherapy.

Limitations of Use

- AKYNZEO for injection has not been studied for the prevention of nausea and vomiting associated with anthracycline plus cyclophosphamide chemotherapy.

AKYNZEO is a combination of palonosetron, a serotonin-3 (5-HT_3) receptor antagonist, and netupitant or fosnetupitant, substance P/neurokinin-1 (NK-1) receptor antagonists: palonosetron prevents nausea and vomiting during the acute phase and netupitant/fosnetupitant prevents nausea and vomiting during both the acute and delayed phase after cancer chemotherapy.

IMPORTANT SAFETY INFORMATION

Warnings and Precautions

- Hypersensitivity reactions, including anaphylaxis, have been reported in patients receiving palonosetron, one of the components of AKYNZEO, with or without known hypersensitivity to other 5-HT_3 receptor antagonists.
- Serotonin syndrome has been reported with 5-HT_3 receptor antagonists alone but particularly with concomitant use of serotonergic drugs. Serotonin syndrome can be life threatening. Symptoms associated with serotonin syndrome may include the following combination of signs and symptoms: mental status changes, autonomic instability, neuromuscular symptoms, seizures, and gastrointestinal symptoms. Patients should be monitored for the emergence of serotonin syndrome, and if symptoms occur, discontinue AKYNZEO and initiate supportive treatment. Patients should be informed of the increased risk of serotonin syndrome, especially if AKYNZEO is used concomitantly with other serotonergic drugs.

Adverse Reactions

- Most common adverse reactions for AKYNZEO capsules and injection: headache, asthenia, dyspepsia, fatigue, constipation and erythema

Drug Interactions

- Use with caution in patients receiving concomitant medications primarily metabolized by CYP3A4. The plasma concentrations of CYP3A4 substrates can increase when co-administered with AKYNZEO. The inhibitory effect on CYP3A4 can last for multiple days
    - Dexamethasone doses should be reduced when given with AKYNZEO. A more than two-fold increase in the systemic exposure of dexamethasone was observed 4 days after a single dose of netupitant or a single infusion of fosnetupitant
    - Consider the potential effects of increased plasma concentrations of midazolam or other benzodiazepines metabolized via CYP3A4 (alprazolam, triazolam) when administering with AKYNZEO. When administered with netupitant, the systemic exposure to midazolam was significantly increased
- Avoid concomitant use of AKYNZEO in patients on chronic use of a strong CYP3A4 inducer such as rifampin as this may decrease the efficacy of AKYNZEO

Use in Specific Populations

- Avoid use of AKYNZEO in patients with severe hepatic impairment, severe renal impairment, or end-stage renal disease
- Avoid use in pregnancy, limited data is available, may cause fetal harm.

For more information about AKYNZEO® please see the full Prescribing Information or visit www.AKYNZEO.com

About the Helsinn Group

Helsinn is a privately owned pharmaceutical group with an extensive portfolio of marketed cancer care products and a robust drug development pipeline. Since 1976, Helsinn has been improving the everyday lives of patients, guided by core family values of respect, integrity and quality. The Group works across pharmaceuticals, biotechnology, medical devices and nutritional supplements and has expertise in research, development, manufacture and the commercialization of therapeutic and supportive care products for cancer, pain and inflammation and gastroenterology. In 2016, Helsinn created the Helsinn Investment Fund to support early-

stage investment opportunities in areas of unmet patient need. The company is headquartered in Lugano, Switzerland, with operating subsidiaries in Switzerland, Ireland, the U.S., Monaco and China, as well as a product presence in approximately 190 countries globally.
To learn more about Helsinn Group please visit www.helsinn.com

For more information:

Helsinn Group Media Contact
Paola Bonvicini
Group Head of Communication
Lugano, Switzerland
Tel: +41 (0) 91 985 21 21
Info-hhc@helsinn.com

For more information, please visit www.helsinn.com and follow us on Twitter, LinkedIn and Vimeo