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Completed

# A Safety Study of Oral Netupitant and Palonosetron for the Prevention of Nausea and Vomiting

**ClinicalTrials.gov ID** NCT01376297

**Sponsor** Helsinn Healthcare SA

**Information provided by** Helsinn Healthcare SA (Responsible Party)

**Last Update Posted** 2014-11-17

# Study Details Tab

## Study Overview

**Brief Summary**

NETU-10-29 is a clinical study assessing safety of netupitant and palonosetron, two antiemetic drugs, both given with oral dexamethasone. The objective of the study is to evaluate if netupitant and palonosetron are safe when administered to prevent nausea and vomiting after administration of repeated cycles of chemotherapy.

**Official Title**

A Phase III, Multicenter, Randomized, Double-blind, Unbalanced (3:1) Active Control Study to Assess the Safety and Describe the Efficacy of Netupitant and Palonosetron for the Prevention of Chemotherapy-induced Nausea and Vomiting in Repeated Chemotherapy Cycles.

**Conditions**

Feedback



HELSINN EXHIBIT 2018
Azurity Pharmaceuticals, Inc. v. Helsinn Healthcare S.A.
IPR2025-00947

Chemotherapy-Induced Nausea and Vomiting

**Intervention / Treatment**

- Drug: Netupitant and Palonosetron
- Drug: Aprepitant
- Drug: Palonosetron
- Drug: Dexamethasone

**Other Study ID Numbers**

**Study Start**

2011-07

**Primary Completion (Actual)**

2012-09

**Enrollment (Actual)**

413

**Study Type**

Interventional

**Phase**

Phase 3

**Resource links provided by the National Library of Medicine**

MedlinePlus (https://medlineplus.gov/) related topics: Nausea and Vomiting (https://medlineplus.gov/nauseaandvomiting.html)

Drug Information (https://dailymed.nlm.nih.gov/dailymed/) available for:
Dexamethasone (https://dailymed.nlm.nih.gov/dailymed/search.cfm?labeltype=human&query=Dexamethasone)
Palonosetron (https://dailymed.nlm.nih.gov/dailymed/search.cfm?labeltype=human&query=Palonosetron)
Aprepitant (https://dailymed.nlm.nih.gov/dailymed/search.cfm?labeltype=human&query=Aprepitant)

FDA Drug and Device Resources (https://clinicaltrials.gov/fda-links)

## Contacts and Locations

This section provides contact details for people who can answer questions about joining this study, and information on where this study is taking place.

To learn more, please see the Contacts and Locations section in How to Read a Study Record (https://clinicaltrials.gov/study-basics/how-to-read-study-record#contacts-and-locations).

This study has 75 locations

### United States

#### Alabama Locations

**Muscle Shoals,, Alabama, United States, 35661**
Northwest Alabama Cancer Center PC

#### California Locations

**Burbank, California, United States, 91505**
East Valley Hematology and Oncology Medical Group

**Los Angeles, California, United States, 90017**
American Institute of Research

#### New Jersey Locations

**East Orange, New Jersey, United States, 07018**
Veterans Administration New Jersey Health Care System

#### New York Locations

**Nyack, New York, United States, 10960**
Hematology Oncology Associates of Rockland

#### Ohio Locations

**Canton, Ohio, United States, 44708**
Hematology and Oncology Associates, Inc.

**Massillon, Ohio, United States, 44646**
Tri-County Hematology & Oncology Associates, Inc

## Rhode Island Locations

**Pawtucket, Rhode Island, United States, 02860**
Cancer Center at Memorial Hospital of RI

## South Carolina Locations

**Spartanburg, South Carolina, United States, 29303**
Spartanburg Regional Health Services

## Texas Locations

**Corpus Christi, Texas, United States, 78405**
South Texas Comrehensive Cancer Centers

**Houston, Texas, United States, 77030-4009**
MD Anderson Cancer Center

## Bulgaria

**Pleven, Bulgaria, 5800**
UMHAT "Dr. Georgi Stranski"

**Shumen, Bulgaria, 9700**
Complex Oncology Center - Shumen Ltd. [Oncology]

**Tarnovo, Bulgaria, 5000**
COC - Veliko Tarnovo Dept. Medical Oncology

**Varna, Bulgaria, 9010**
Specialized Hospital for Active Treatment in Oncology "Dr. Marko Markov" Varna

**Vratsa, Bulgaria, 3000**
COC - Vratsa Dept. of Palliative Care

## Czech Republic

**Mlada Boleslav, Czech Republic, 293 50**
Oblastni nemocnice Mlada Boleslav a.s., Onkologie

**Nymburk, Czech Republic, 288 01**
AVICENNUS s.r.o. Onkologie Nymburk

**Praha 5, Czech Republic, 150 06**
Fakultni nemocnice v Motole

**Praha 5, Czech Republic, 150 30**

Nemocnice Na Homolce, Oddeleni klinicke onkologie

**Znojmo, Czech Republic, 669 02**
Nemocnice Znojmo, p.o.

## Germany

**Augsburg, Germany, 86150**
Gemeinschaftspraxis, Dr. Med O.Brundler und B.Heinreich, PD Dr. med M.Bangerter Fachärzte für Innere Medizin, Hämatologie und internistische Onkologie

**Berlin, Germany, 12200**
Charite - Campus Benjamin Franklin (CBF)

**Berlin, Germany, 13347**
Medizinisches Versorgungszentrum für Hämatologie und Tumorerkrankungen, HIV/AIDS und Hepatitiden

**Dresden, Germany, 01307**
Universitaetsklinikum Carl Gustav Carus

**Duisburg, Germany, 47166**
St. Johannes Hospital Medizinische Klinik II, Hämatologie, Onkologie und klinische Immunologie

**Freiburg, Germany, 79106**
Praxis Fuer Interdisziplinaere Onkologie und Haematologie

**Hannover, Germany, 30625**
Medizinische Hochschule, Zentrum für Innere Medizin, Klinik für Hämatologie, Hämostaseologie, Onkologie und Stammzelltransplantation

**Hennigsdorf, Germany, 16761**
Ärzteforum Hennigsdorf

**Marburg, Germany, 35037**
Praxis für Innere Medizin, Hämatologie und Internistische Onkologie

**Mönchengladbach, Germany, 41062**
Krankenhaus, Maria Hilf, St. Franziskus Innere Medizin

**Regensburg, Germany, 93053**
OncoPRO GbR Dr. R. Dengler, Dr. A. Kröber

## Hungary

**Budapest, Hungary, 1122**

Országos Onkológiai Intézet, B. Belgyógyászati Osztály

**Gyula, Hungary, 5700**
Bekes Megyei Kepviselo-testulet Pandy Kalman Korhaz

**Kaposvár, Hungary, 7400**
Kaposi Mor Oktato Korhaz [Klinikai Onkologiai Centrum]

**Miskolc, Hungary, 3501**
Borsod-Abaúj-Zemplén Megyei Kórház és Egyetemi Oktatók

**Szentes, Hungary, 6600**
Dr. Bugyi Istvan Korhaz [Oncology]

**Székesfehérvár, Hungary, 8000**
Fejér Megyei Szent György Kórház [Onkológiai Osztály]

## India

**Chennai, India, 600010**
Kumaran Hospital PVT Ltd

**Chennai, India, 600018**
Dr.Rai Memorial Medical centre

**Cuttack, India, 753007**
Acharya Harihara Regional Cancer Centre [Oncology]

**Gujarat, India, 388325**
M.S Patel Cancer Hospital [Oncology]

**Hubli, India, 580025**
Research Unit, The Karnatak cancer therapy & Research Instit

**Jaipur, India, 302016**
S.M.S College And Hospital

**Madurai, India, 625020**
Apollo Speciality Hospital [Oncology]

**Uttar Pradesh, India, 226001**
Lucknow Cancer Institute [Oncology]

**Visakhapatnam, India, 530002**
King George Hospital [Medical Oncology]

## Poland

**Bialystok, Poland, 15-027**
Bialostockie Centrum Onkologii im.

M.Sklodowskiej-Curie im dr. E.Pileckiej z Pododdzialem Chemioterapii Dziennej

**Lublin, Poland, 20-090**
Centrum Onkologii Ziemi Lubelskiej im.Sw.Jana z Dukli III Oddzial Onkologii Ginekologicznej, Radioterapii I Chemioterapii

**Poznan, Poland, 60-535**
Ginekologiczno-Położniczy Szpital Kliniczny UM w Poznaniu

**Poznan, Poland, 60-569**
Szpital Kliniczny Przemienienia Panskiego UM w Poznaniu

**Poznan, Poland, 61-866**
Wielkopolskie Centrum Onkologii im. M. Sklodowskiej-Curie i Onkologii Ginekologicznej

**Prabuty, Poland, 82-550**
Szpital Specjalistyczny

**Raciborz, Poland, 47-400**
Szpital Rejonowy im. dr J. Rostka w Raciborzu

## Russian Federation

**Chelyabinsk, Russian Federation, 454087**
GBUZ "Cheliabinsky Regional Oncology Dispensary"

**Kazan, Russian Federation, 420029**
GAUZ Republican Clinical Oncology Dispensary of Minzdrav of Republic of Tatarstan

**Moscow, Russian Federation, 129128**
Non-State healthcare Indtitution Central Clinical Hospital # 2 named after N.A. Semashko OAO "RZhD"

**Novgorod, Russian Federation, 603001**
FBUZ Privolzhsky District Medical Center of FMBA

**Orel, Russian Federation, 302020**
Regional GUZ Orlovskiy Oncological Dispensary

**Saint-Petersburg, Russian Federation, 197022**
GBOU VPO "Saint-Petersburg State Medical University

**St. Petersburg, Russian Federation, 191104**
GUZ Leningradskiy Regional Oncology Dispensary

**Tula, Russian Federation, 300040**

GUZ Tula Regional Oncological Dispensary [Oncology]

**Tyumen, Russian Federation, 625041**
GBUZ Tyumen Regional Oncology Dispensary

**Ufa, Russian Federation, 450054**
GBUZ Republican Clinical Oncology Dispensary of Minzdrav of Republic of Bashkortostan

## Serbia

**Belgrade, Serbia, 11000**
Clinical Hospital Center Bezanijska Kosa

**Beograd, Serbia, 11000**
Institute of oncology and radiology of Serbia

**Kragujevac, Serbia, 34000**
Clinical Center Kragujevac

## Ukraine

**Chernivtsi, Ukraine, 58013**
Chernivtsi Regional Cancer Hospital [Outpatient Department]

**Dnipropetrovks, Ukraine, 49102**
Komunalnyi zaklad Miska bahatoprofilna klinichna likarnia #4

**Dnipropetrovsk, Ukraine, 49100**
KZ MKL19, MOTsr, vd khimter [viddilennia khimioterapii]

**Donetsk, Ukraine, 83092**
KKLPZ DnOPTsr [radio vd#3]

**Kharkiv, Ukraine, 61024**
DU IMR AMNU [vd khemter]

**Poltava, Ukraine, 36011**
Poltavskyi oblasnyi klinichnyi onkolohichnyi dyspanser Pol

**Uzhgorod, Ukraine, 88014**
Zakarpatskyi oblasnyi klinichnyi onkodyspanser [viddilennia

**Zaporizhia, Ukraine, 69040**
ZaOKOD [abdom vd]

# Participation Criteria

Researchers look for people who fit a certain description, called eligibility criteria. Some examples of these criteria are a person's general health condition or prior treatments.

For general information about clinical research, read Learn About Studies (https://clinicaltrials.gov/study-basics/learn-about-studies).

## Eligibility Criteria

**Description**

Inclusion Criteria:

- Signed written informed consent.
- Naïve to cytotoxic chemotherapy. Previous biological or hormonal therapy is permitted.
- Diagnosed with a malignant tumor.
- If scheduled to receive repeated consecutive courses of chemotherapy, a single dose of one or more of the following agents administered on Day 1 is allowed:
    - Highly emetogenic chemotherapy: any I.V. dose of cisplatin, mechlorethamine, streptozocin, cyclophosphamide more or equal to 1500 mg/m2, carmustine, dacarbazine;
    - Moderately emetogenic chemotherapy: any I.V. dose of oxaliplatin, carboplatin, epirubicin, idarubicin, ifosfamide, irinotecan, daunorubicin, doxorubicin, cyclophosphamide I.V. (less than 1500 mg/m2), cytarabine I.V. (more than 1 g/m2), azacidine, alemtuzumab, bendamustine, or clofarabine.
- If scheduled to receive combination regimens, the most emetogenic agent is to be given as first on Day 1 and the infusion must be completed within 6 hours.
- If scheduled to receive chemotherapy agents of minimal to low emetogenic potential, they are to be given on Day 1 following the most emetogenic agent or on any subsequent study day.
- ECOG Performance Status of 0, 1, or 2
- Female patients of either non-childbearing potential or child-bearing potential with a commitment to use contraceptive methods throughout the clinical trial
- Hematologic and metabolic status adequate for receiving a moderately emetogenic regimen based on laboratory criteria (Total Neutrophils,Platelets, Bilirubin, Liver enzymes, Serum Creatinine or Creatinine Clearance)

Exclusion Criteria:

- If female, lactating or pregnant
- Current use of illicit drugs or current evidence of alcohol abuse.
- Scheduled to receive either cyclophosphamide I.V. (500 to 1500 mg/m2) and I.V. doxorubicin (more or equal to 40 mg/m2) or cyclophosphamide I.V. (500 to 1500 mg/m2) and I.V. epirubicin (more or equal to 60 mg/m2).
- Scheduled to receive moderately or highly emetogenic chemotherapy from Day 2 to Day 5 following Day 1 chemotherapy administration.
- Active infection or uncontrolled disease except for malignancy that may pose unwarranted risks in administering the study drugs to the patient.
- Known hypersensitivity or contraindication to 5-HT3 receptor antagonists or dexamethasone.

- Previously received an NK1 receptor antagonist
- Participation in a clinical trial involving oral netupitant administered in combination with palonosetron.
- Any investigational drugs taken within 4 weeks prior to Day 1 of cycle 1, and/or is scheduled to receive any investigational drug during the study.
- Systemic corticosteroid therapy at any dose within 72 hours prior to Day 1 of cycle 1. Topical and inhaled corticosteroids with a steroid dose of less or equal to 10 mg of prednisone daily or its equivalent are permitted. Non-study drug dexamethasone as pre-medication in patients scheduled to receive taxanes is allowed.
- Scheduled to receive bone marrow transplantation and/or stem cell rescue therapy.
- Scheduled to receive any strong or moderate inhibitor of CYP3A4 or its intake within 1 week prior to Day 1
- Scheduled to receive any of the following CYP3A4 substrates: terfenadine, cisapride, astemizole, pimozide.
- Scheduled to receive any CYP3A4 inducer or its intake within 4 weeks prior to Day 1
- History or predisposition to cardiac conduction abnormalities, except for incomplete right bundle branch block.
- History of risk factors for Torsade de Point (heart failure, hypokalemia, family history of Long QT Syndrome).
- Severe cardiovascular diseases within 3 months prior to Day 1, including myocardial infarction, unstable angina pectoris, significant valvular or pericardial disease, history of ventricular tachycardia, symptomatic Congestive Heart Failure and severe uncontrolled arterial hypertension.
- Any illness or condition that, in the opinion of the investigator, may confound the results of the study or pose unwarranted risks in administering the investigational product to the patient.
- Concurrent medical condition that would preclude administration of dexamethasone for 4 days such as systemic fungal infection or uncontrolled diabetes.

**Ages Eligible for Study**

18 Years and older (Adult, Older Adult )

**Sexes Eligible for Study**

All

**Accepts Healthy Volunteers**

No

## Study Plan

This section provides details of the study plan, including how the study is designed and what the study is measuring.

### How is the study designed?

#### Design Details

**Primary Purpose** : Prevention
**Allocation** : Randomized
**Interventional Model** : Parallel Assignment
**Masking** : Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)

Arms and Interventions

| Participant Group/Arm | Intervention/Treatment |
|---|---|
| Experimental: Netupitant and Palonosetron plus dexamethasone<br><br>Oral netupitant/palonosetron (300 mg/0.50 mg) hard capsule (on Day 1) with oral dexamethasone prior to each scheduled chemotherapy cycle | Drug: Netupitant and Palonosetron<br>Drug: Dexamethasone |
| Active Comparator: Aprepitant and Palonosetron plus dexamethasone<br><br>Oral aprepitant hard capsule 125 mg (on Day 1) + 80 mg daily (for the following two days) and oral palonosetron soft capsule 0.50 mg (on Day 1) given with oral dexamethasone at each scheduled chemotherapy cycle. | Drug: Aprepitant<br>Drug: Palonosetron<br>Drug: Dexamethasone |

## What is the study measuring?

Primary Outcome Measures

| Outcome Measure | Measure Description | Time Frame |
|---|---|---|
| Percentage of Patients With Adverse Events | This was a safety study where Adverse Events is the primary outcome (defined by the current ICH Guideline for Good Clinical Practice). Patients were randomized according to a 3:1 ratio (netupitant/palonosetron:aprepitant/palonosetron). No formal comparison was planned, the presence of a control in the same patient population helped interpret any unexpected safety finding in the experimental arm.The number of patients was estimated in order to have more than 100 patients treated with the netupitant/palonosetron comination for up to at least six cycles. Based on 100 patients, if a given AE is not observed, an AE incidence of 3% or greater can be excluded with 95% confidence. | Participants will be followed for the duration of the chemotherapy, an expected average duration of up to 24 weeks assuming 6 chemotherapy cycles given every 4 weeks |

## Collaborators and Investigators

This is where you will find people and organizations involved with this study.

**Sponsor**

**Helsinn Healthcare SA**

**Collaborators**

- Parexel

## Publications

**From PubMed**

These publications come from PubMed, a public database of scientific and medical articles. This list is automatically created by ClinicalTrials.gov Identifier (NCT Number), and these articles may or may not be about the study.


- Schwartzberg L, Karthaus M, Rossi G, Rizzi G, Borroni ME, Rugo HS, Jordan K, Hansen V. Fixed combination of oral NEPA (netupitant-palonosetron) for the prevention of acute and delayed chemotherapy-induced nausea and vomiting in patients receiving multiple cycles of chemotherapy: Efficacy data from 2 randomized, double-blind phase III studies. Cancer Med. 2019 May;8(5):2064-2073. doi: 10.1002/cam4.2091. Epub 2019 Apr 9. (https://pubmed.ncbi.nlm.nih.gov/30968588)

- Rugo HS, Rossi G, Rizzi G, Aapro M. Efficacy of NEPA (netupitant/palonosetron) across multiple cycles of chemotherapy in breast cancer patients: A subanalysis from two phase III trials. Breast. 2017 Jun;33:76-82. doi: 10.1016/j.breast.2017.02.017. Epub 2017 Mar 10. (https://pubmed.ncbi.nlm.nih.gov/28285236)


## Study Record Dates

These dates track the progress of study record and summary results submissions to ClinicalTrials.gov. Study records and reported results are reviewed by the National Library of Medicine (NLM) to make sure they meet specific quality control standards before being posted on the public website.

**Study Registration Dates**

**First Submitted**

2011-06-16

HHS Vulnerability Disclosure

**First Submitted that Met QC Criteria**

2011-06-17

**First Posted (Estimated)**

2011-06-20

### Results Reporting Dates

**Results First Submitted**

2014-11-06

**Results First Submitted that Met QC Criteria**

2014-11-06

**Results First Posted (Estimated)**

2014-11-17

### Certification/Extension Dates

**Certification/Extension First Submitted**

2013-01-16

**Certification/Extension First Submitted that Met QC Criteria**

2013-01-16

**Certification/Extension First Posted (Estimated)**

2013-01-25

### Study Record Updates

**Last Update Submitted that met QC Criteria**

2014-11-06

**Last Update Posted (Estimated)**

2014-11-17

**Last Verified**

2014-11

## More Information

### Terms related to this study

**Additional Relevant MeSH Terms**

Signs and Symptoms, Digestive

Nausea
Vomiting
Anti-Inflammatory Agents
Antiemetics
Autonomic Agents
Peripheral Nervous System Agents
Physiological Effects of Drugs
Gastrointestinal Agents
Glucocorticoids
Hormones
Hormones, Hormone Substitutes, and Hormone Antagonists
Antineoplastic Agents, Hormonal
Antineoplastic Agents
Neurokinin-1 Receptor Antagonists
Neurotransmitter Agents
Molecular Mechanisms of Pharmacological Action
Serotonin 5-HT3 Receptor Antagonists
Serotonin Antagonists
Serotonin Agents
Dexamethasone
Aprepitant
Palonosetron