Efficacy and safety of keverprazan-amoxicillin dual therapy for *Helicobacter pylori* first-line treatment

(Open-label, randomized controlled study)

(Protocol Number：BW-Z2314)

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Version Number：1.1

Protocol Summary

Protocol Number	**BW-Z2314**
Protocol Title	**Efficacy and safety of keverprazan-amoxicillin dual therapy for *Helicobacter pylori* first-line treatment**
Version Number	**1.1**
Observation Subjects	**Patients with *Helicobacter pylori* (Hp) infection who require eradication therapy**
Study Objective	**To compare with rabeprazole quadruple therapy and evaluate the efficacy and safety of different treatment durations (10 days, 14 days) of keverprazan combined with amoxicillin dual therapy for Hp eradication** **To evaluate the efficacy and safety of keverprazan combined with amoxicillin dual therapy of different durations (10-day and 14-day) for Hp eradication, in comparison with rabeprazole-based quadruple therapy**
Study Design	**Open-label, randomized controlled study**
Total Number of Cases	**414 patients**
Eligibility Criteria / Inclusion and Exclusion Criteria	**Inclusion Criteria** **1) Adult patients aged 18 to 65 years old, regardless of gender;** **2) *H. pylori* positive, diagnosed a 13C-urea breath test (13C-UBT), ^{14}C-urea breath test (^{14}C-UBT), H&E staining or bacterial culture;** **3) No previous history of *H. pylori* eradication therapy;** **4) Subjects able to independently complete the recording of the subject diary card;** **5) Subjects who fully understand the trial content, voluntarily participate in the trial, can complete the trial process, and sign the informed consent form.** **Exclusion Criteria** **1) Use of acid-suppressing drugs such as proton pump inhibitors (PPIs), potassium-competitive acid blocker (P-CAB), H2 receptor antagonists, etc., within 2 weeks before enrollment, or use of antibiotics within 4 weeks before enrollment;** **2) Active peptic ulcer with complications such as bleeding, perforation, obstruction, canceration, etc.;**

	3) Previous history of esophageal or gastric surgery; **4) Severe systemic diseases, including diseases of major organs dysfunction such as (cardiac, pulmonary, cerebral), hepatic or renal impairment, malignant neoplasms , or other diseases;** **5) Participants with allergies or hypersensitivity to keverprazan, rabeprazole, amoxicillin, clarithromycin, bismuth agents, including its excipients (such as mannitol, microcrystalline cellulose, crospovidone, hypromellose, magnesium stearate, etc.);** **6) Female participants who are pregnant, breastfeeding;** **7) Long-term alcohol abuse or any other conditions that increase the risk of treatment-related adverse events;** **8) Participation in other studies within the past 3 months, inability to clearly express oneself, or inability to cooperate with investigators;** **9) Deemed unsuitable for participation in the study by the investigator for any other reason.**
Investigational Drugs	**Keverprazan Hydrochloride Tablets, specification: 10mg/tablet, trade name: Beiwen®, manufacturer: Nanjing Co-phine Shenghui Pharmaceutical Co., Ltd.** **Rabeprazole Sodium Enteric-coated Tablets, specification: 10mg/tablet, trade name: Pariet® , manufacturer: Eisai (China) Pharmaceutical Co., Ltd.**
Treatment Protocols	**Keverprazan dual therapy for 10 days (K10 group):** **Keverprazan 20 mg per dose, twice daily (bid) + Amoxicillin 1 g per dose, three times (tid) daily, for 10 days.** **Keverprazan dual therapy for 14 days (K14 group): Keverprazan 20 mg, bid + Amoxicillin 1 g, tid, for 14 days.** **Rabeprazole quadruple therapy for 14 days (R14 group): Rabeprazole sodium 10 mg + Amoxicillin 1 g + Clarithromycin 500 mg + Colloidal pectin bismuth 200 mg, bid, for 14 days.**
Efficacy Endpoints	***H. pylori* eradication rate 6-8 weeks after the end of eradication treatment.**

Safety Endpoints	**1) Vital signs, physical examination;** **2) Adverse events and serious adverse events.**
Study Procedures	**Screening period: -7 to 0 days** **1) Obtain informed consent;** **2) Collect demographic information and baseline characteristics of the subject;** **3) Record medical history and current treatment, concomitant medications (including prescription and over-the-counter drugs);** **4) Vital signs, physical examination;** **5) *H. pylori* test;** **6) Review inclusion and exclusion criteria;** **7) Eligible subjects will be randomized to receive assigned treatment based on randomization numbers.** **Visit period V2 (telephone visit):** **K10 group: 10 days (±3 days), K14 group: 14 days (±3 days), R14 group: 14 days (±3 days)** **1) Vital signs, physical examination;** **2) Record concomitant medications;** **3) Record adverse events after medication.** **Visit period V3: 9 weeks (±7 days)** **1) Vital signs, physical examination;** **2) *H. pylori* test;** **3) Record concomitant medications;** **4) Record adverse events after medication.**
Statistical Analysis	**Efficacy Endpoints:** **The primary efficacy endpoint is the proportion of subjects achieving successful Helicobacter pylori eradication 6-8 weeks after completion of first-line therapy. Eradication rates will be reported with two-sided 95% confidence intervals (CIs) calculated using the Clopper-Pearson method. Inter-group differences will be estimated along with their 95% CIs using the Miettinen-Nurminen method. Inter-group comparisons will be performed using the chi-square test or Fisher's exact test, as appropriate.** **Safety Endpoints:** **Adverse events (AEs) will be coded using the Medical Dictionary for Regulatory Activities (MedDRA) and**

	summarized by System Organ Class (SOC) and Preferred Term (PT). The number of subjects experiencing AEs, event counts, and incidence rates will be calculated. Between-group comparisons of AE incidence will be assessed using Fisher's exact test.
Study Duration	**8 to 10 weeks**