

# Efficacy and safety of peginterferon alpha-2a (40KD) (PEGASYS®) or adefovir dipivoxil in positive chronic hepatitis B patients

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		<input type="checkbox"/> Protocol
<b>Registration date</b> 07/12/2009	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
<b>Last Edited</b> 27/10/2022	<b>Condition category</b> Digestive System	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**Clinical Trials Information System (CTIS)**  
Nil known

**ClinicalTrials.gov (NCT)**  
NCT00962533

**Protocol serial number**  
ML18376

## Study information

**Scientific Title**

A randomised open label study evaluating the efficacy and safety of peginterferon alpha-2a (40KD) (PEGASYS®) or adefovir dipivoxil in patients with lamivudine-resistant HBeAg positive chronic hepatitis B

**Study objectives**

To compare the efficacy and safety of peginterferon alpha-2a with adefovir dipivoxil in patients with lamivudine-resistant HBeAg positive chronic hepatitis B.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Not provided at time of registration

**Study design**

Prospective randomised open-label study

**Primary study design**

Interventional

**Study type(s)**

Treatment

**Health condition(s) or problem(s) studied**

Chronic hepatitis B

**Interventions**

Eligible patients were randomised to treatment with one of the following:

1. Peginterferon alpha-2a 180 µg subcutaneously (sc) once weekly for 48 weeks, in combination with continued lamivudine 100 mg orally (po) daily for the first 12 weeks
2. Adefovir dipivoxil 10 mg daily for 72 weeks, in combination with continued lamivudine 100 mg po daily for the first 12 weeks

At the end of treatment, patients were followed up for an additional 24 weeks.

**Intervention Type**

Drug

**Phase**

Not Specified

**Drug/device/biological/vaccine name(s)**

Peginterferon alpha-2a (PEGASYS®), adefovir dipivoxil

**Primary outcome(s)**

Rate of HBeAg seroconversion rate defined as loss of HBeAg and presence of anti-HBe antibodies at Week 72.

**Key secondary outcome(s))**

1. Loss of HBeAg at weeks 48 and 72
2. HBV DNA reduction (HBV DNA less than 100,000 copies/mL) at weeks 48 and 72
3. HBV DNA at least 1 log reduction from baseline at weeks 48 and 72
4. HBV DNA undetectable (less than 400 copies/mL by Cobas Amplicor HBV Monitor) at weeks 48 and 72
5. ALT normalisation at weeks 48 and 72
6. HBsAg seroconversion (loss of HBsAg and presence of anti-HBs antibodies) at weeks 48 and 72
7. Quantitative changes from baseline in HBeAg and HBsAg
8. The proportion of patients with YMDD mutant HBV DNA (INNO-LiPA)
9. Frequency and severity of on-treatment adverse events and changes from baseline in vital signs and laboratory parameters

**Completion date**

01/06/2008

## Eligibility

**Key inclusion criteria**

1. Male and female patients aged greater than or equal to 18 years and less than or equal to 65 years
2. Hepatitis B surface antigen (HBsAg) positive, hepatitis B 'e' antigen (HBeAg) positive for at least 6 months, and anti-HBs negative
3. Treatment with lamivudine for at least 6 months and ongoing
4. Laboratory or clinical signs of lamivudine resistance (for example hepatitis B virus deoxyribonucleic acid [HBV DNA] rebound greater than 100,000 copies/mL and/or alanine aminotransferase [ALT] flares)
5. Lamivudine resistant in terms of YMDD mutant HBV detection (INNO-LiPA method)
6. ALT greater than upper limit of normal (ULN) but less than or equal to 10 x ULN, on at least two occasions taken greater than or equal to 14 days apart in the previous 6 months. At least one test should be performed after signing the consent form.
7. Negative urine or serum pregnancy test (for women of childbearing potential) documented within the 24-hour period prior to the first dose of test drug. Additionally, all females must be using reliable contraception during the study and for 3 months after treatment completion.
8. No evidence of cirrhosis as confirmed by liver biopsy taken in the previous 6 months

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

1. Patients who had previously received treatment with adefovir dipivoxil or other drugs with activity against HBV within the prior 6 months, except for lamivudine
2. Antiviral, anti-neoplastic or immuno-modulatory treatment (including supraphysiologic doses of steroids and radiation) 6 months prior to the first dose of randomised treatment (except for less than or equal to 7 days of acyclovir for herpetic lesions more than 1 month prior to first administration of randomised treatment). Patients who are expected to need systemic antiviral therapy other than that provided by the study at any time during their participation are also excluded.
3. Women with ongoing pregnancy or breast feeding
4. Co-infection with active hepatitis A, hepatitis C, hepatitis D and/or human immunodeficiency virus (HIV)
5. Evidence of decompensated liver disease (Child-Pugh score greater than 5). Child-Pugh greater than 5 means, if one of the following five conditions are met, the patient has to be excluded:
  - 5.1. Serum albumin less than 35 g/L
  - 5.2. Prothrombin time greater than or equal to 4 seconds prolonged
  - 5.3. Serum bilirubin greater than 34  $\mu\text{mol/L}$
  - 5.4. History of encephalopathy
  - 5.5. History of variceal bleeding
  - 5.6. Ascites
6. History or other evidence of a medical condition associated with chronic liver disease other than viral hepatitis (e.g., haemochromatosis, autoimmune hepatitis, metabolic liver disease, alcoholic liver disease, toxin exposures, thalassaemia)
7. Signs or symptoms of hepatocellular carcinoma. Patients with a value of alpha-fetoprotein greater than 100 ng/mL are excluded, unless stability (less than 10% increase) has been documented over at least the previous 3 months. Patients with values greater than 20 ng/mL but less than or equal to 100 ng/mL may be enrolled, if hepatic neoplasia has been excluded by liver imaging
8. Neutrophil count less than 1500 cells/mm<sup>3</sup> or platelet count less than 90,000 cells/mm<sup>3</sup> at screening
9. Haemoglobin less than 11.5 g/dL for females and less than 12.5 g/dL for men at screening
10. Serum creatinine level greater than 1.5 x ULN at screening
11. Phosphorus less than 0.65 mmol/L
12. History of severe psychiatric disease, especially depression. Severe psychiatric disease is defined as treatment with an antidepressant medication or a major tranquiliser at therapeutic doses for major depression or psychosis, respectively, for at least 3 months at any previous time or any history of the following: a suicide attempt, hospitalisation for psychiatric disease, or a period of disability due to a psychiatric disease.
13. History of a severe seizure disorder or current anticonvulsant use
14. History of immunologically mediated disease (e.g. inflammatory bowel disease, idiopathic thrombocytopenic purpura, lupus erythematosus, autoimmune haemolytic anaemia, scleroderma, psoriasis, rheumatoid arthritis etc.)
15. History of chronic pulmonary disease associated with functional limitation
16. History of severe cardiac disease (e.g. New York Heart Association [NYHA] Functional Class III or IV, myocardial infarction within 6 months, ventricular tachyarrhythmias requiring ongoing treatment, unstable angina or other significant cardiovascular diseases)
17. Major organ transplantation or other evidence of severe illness, malignancy, or any other conditions which would make the patient, in the opinion of the investigator, unsuitable for the study
18. History of thyroid disease poorly controlled on prescribed medications, elevated thyroid stimulating hormone (TSH) concentrations with elevation of antibodies to thyroid peroxidase

and any clinical manifestations of thyroid disease

19. Evidence of severe retinopathy or clinically relevant ophthalmologic disorder (e.g. due to hypertension or diabetes mellitus cytomegalovirus [CMV] retinitis, macula degeneration)

20. Patients consuming alcohol in excess of 20 g/day for women and 30 g/day for men in the 6 months preceding enrolment

21. Evidence of drug abuse or treatment with methadone within one year of study entry

22. Patients included in another trial or having been given investigational drugs within 12 weeks prior to screening

23. Inability or unwillingness to provide informed consent or abide by the requirements of the study

**Date of first enrolment**

01/10/2005

**Date of final enrolment**

01/06/2008

## Locations

**Countries of recruitment**

China

Hong Kong

**Study participating centre**

**Nanfang Hospital**

Guangzhou

China

510515

## Sponsor information

**Organisation**

Shanghai Roche Pharmaceuticals Ltd (China)

**ROR**

<https://ror.org/02hv5e369>

## Funder(s)

**Funder type**

Industry

## Funder Name

Shanghai Roche Pharmaceuticals Ltd (China)

# Results and Publications

## Individual participant data (IPD) sharing plan

Not provided at time of registration

## IPD sharing plan summary

Not provided at time of registration

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		01/01/2021	27/10/2022	Yes	No