

เอกสารกำกับยาภาษาอังกฤษ

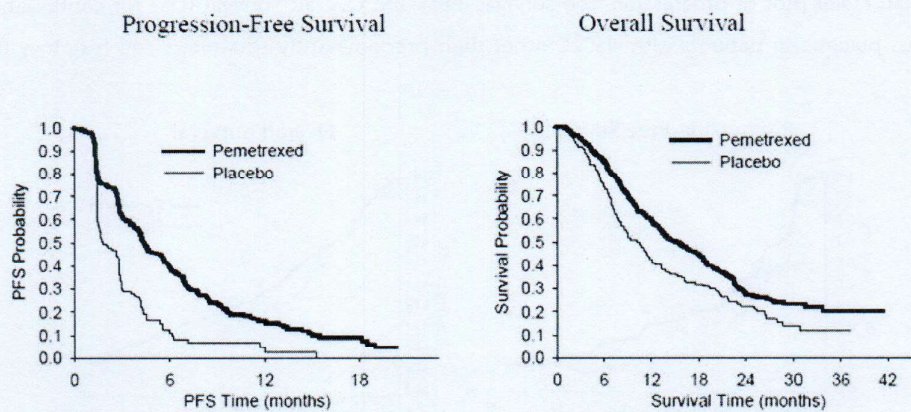
PFS. The median OS for the overall population (n=663) was 13.4 months for the pemetrexed arm and 10.6 months for the placebo arm, hazard ratio=0.79 (95% CI=0.65-0.95, $p=0.01192$).

Consistent with other pemetrexed studies, a difference in efficacy according to NSCLC histology was observed in JMEN. For patients with NSCLC other than predominantly squamous cell histology (n=430, independently reviewed population) median PFS was 4.4 months for the pemetrexed arm and 1.8 months for the placebo arm, hazard ratio=0.47 (95% CI=0.37-0.60, $p=0.00001$). The median OS for patients with NSCLC other than predominantly squamous cell histology (n=481) was 15.5 months for the pemetrexed arm and 10.3 months for the placebo arm, hazard ratio=0.70 (95% CI=0.56-0.88, $p=0.002$). Including the induction phase the median OS for patients with NSCLC other than predominantly squamous cell histology was 18.6 months for the pemetrexed arm and 13.6 months for the placebo arm, hazard ratio=0.71 (95% CI=0.56-0.88, $p=0.002$).

The PFS and OS results in patients with squamous cell histology suggested no advantage for pemetrexed over placebo.

There were no clinically relevant differences observed for the safety profile of pemetrexed within the histology subgroups.

JMEN: Kaplan Meier plots of progression-free survival (PFS) and overall survival pemetrexed versus placebo in patients with NSCLC other than predominantly squamous cell histology:



PARAMOUNT

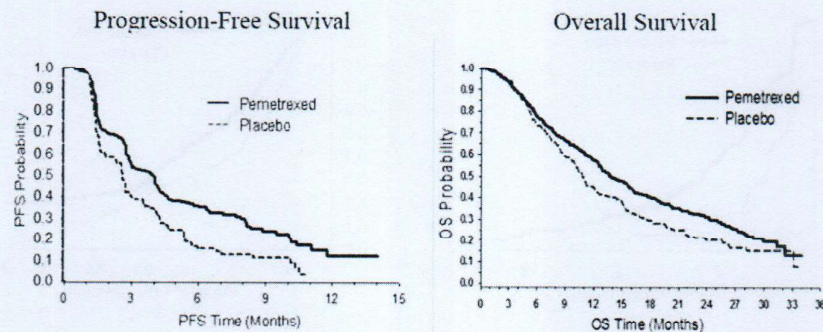
A multicentre, randomised, double-blind, placebo-controlled Phase 3 study (PARAMOUNT), compared the efficacy and safety of continuation maintenance treatment with pemetrexed plus BSC (n=359) with that of placebo plus BSC (n=180) in patients with locally advanced (Stage IIIB) or metastatic (Stage IV) NSCLC other than predominantly squamous cell histology who did not progress after 4 cycles of first line doublet therapy of pemetrexed in combination with cisplatin. Of the 939 patients treated with pemetrexed plus cisplatin induction, 539 patients were randomised to maintenance treatment with pemetrexed or placebo. Of the randomised patients, 44.9% had a complete/partial response and 51.9% had a response of stable disease to pemetrexed plus cisplatin induction. Patients randomised to maintenance treatment were required to have an ECOG performance status 0 or 1. The median time from the start of pemetrexed plus cisplatin induction therapy to the start of maintenance treatment was 2.96 months on both the pemetrexed arm and the placebo arm. Randomised patients received maintenance treatment until disease progression. Efficacy and safety were measured from the time of randomisation after completion of first line (induction) therapy. Patients received a median of 4 cycles of maintenance treatment with pemetrexed and 4 cycles of placebo. A total of 169 patients (47.1%) completed ≥ 6 cycles maintenance treatment with pemetrexed, representing at least 10 total cycles of pemetrexed.

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The study met its primary endpoint and showed a statistically significant improvement in PFS in the pemetrexed arm over the placebo arm (n=472, independently reviewed population; median of 3.9 months and 2.6 months, respectively) (hazard ratio=0.64, 95% CI=0.51-0.81, $p=0.0002$). The independent review of patient scans confirmed the findings of the investigator assessment of PFS. For randomised patients, as measured from the start of pemetrexed plus cisplatin first line induction treatment, the median investigator-assessed PFS was 6.9 months for the pemetrexed arm and 5.6 months for the placebo arm (hazard ratio=0.59 95% CI=0.47-0.74).

Following pemetrexed plus cisplatin induction (4 cycles), treatment with pemetrexed was statistically superior to placebo for OS (median 13.9 months versus 11.0 months, hazard ratio=0.78, 95% CI=0.64-0.96, $p=0.0195$). At the time of this final survival analysis, 28.7% of patients were alive or lost to follow up on the pemetrexed arm versus 21.7% on the placebo arm. The relative treatment effect of pemetrexed was internally consistent across subgroups (including disease stage, induction response, ECOG PS, smoking status, gender, histology and age) and similar to that observed in the unadjusted OS and PFS analyses. The 1 year and 2 year survival rates for patients on pemetrexed were 58% and 32% respectively, compared to 45% and 21% for patients on placebo. From the start of pemetrexed plus cisplatin first line induction treatment, the median OS of patients was 16.9 months for the pemetrexed arm and 14.0 months for the placebo arm (hazard ratio=0.78, 95% CI=0.64-0.96). The percentage of patients that received post study treatment was 64.3% for pemetrexed and 71.7% for placebo.

PARAMOUNT: Kaplan Meier plot of progression-free survival (PFS) and Overall Survival (OS) for continuation pemetrexed maintenance versus placebo in patients with NSCLC other than predominantly squamous cell histology (measured from randomisation)



The pemetrexed maintenance safety profiles from the two studies JMEN and PARAMOUNT were similar.

5.2 Pharmacokinetic properties

The pharmacokinetic properties of pemetrexed following single-agent administration have been evaluated in 426 cancer patients with a variety of solid tumours at doses ranging from 0.2 to 838 mg/m² infused over a 10-minute period. Pemetrexed has a steady-state volume of distribution of 9 l/m². *In vitro* studies indicate that pemetrexed is approximately 81% bound to plasma proteins. Binding was not notably affected by varying degrees of renal impairment. Pemetrexed undergoes limited hepatic metabolism. Pemetrexed is primarily eliminated in the urine, with 70% to 90% of the administered dose being recovered unchanged in urine within the first 24 hours following administration. *In vitro* studies indicate that pemetrexed is actively secreted by OAT3 (organic anion transporter). Pemetrexed total systemic clearance is 91.8 ml/min and the elimination half-life from plasma is 3.5 hours in patients with normal renal function (creatinine clearance of 90 ml/min). Between patient variability in clearance is moderate at 19.3%. Pemetrexed total systemic exposure (AUC) and maximum plasma concentration increase proportionally with dose. The pharmacokinetics of pemetrexed are consistent over multiple treatment cycles.

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The pharmacokinetic properties of pemetrexed are not influenced by concurrently administered cisplatin. Oral folic acid and intramuscular vitamin B₁₂ supplementation do not affect the pharmacokinetics of pemetrexed.

5.3 Preclinical safety data

Administration of pemetrexed to pregnant mice resulted in decreased foetal viability, decreased foetal weight, incomplete ossification of some skeletal structures and cleft palate.

Administration of pemetrexed to male mice resulted in reproductive toxicity characterised by reduced fertility rates and testicular atrophy. In a study conducted in beagle dog by intravenous bolus injection for 9 months, testicular findings (degeneration/necrosis of the seminiferous epithelium) have been observed. This suggests that pemetrexed may impair male fertility. Female fertility was not investigated.

Pemetrexed was not mutagenic in either the *in vitro* chromosome aberration test in Chinese hamster ovary cells, or the Ames test. Pemetrexed has been shown to be clastogenic in the *in vivo* micronucleus test in the mouse.

Studies to assess the carcinogenic potential of pemetrexed have not been conducted.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Mannitol

Hydrochloric acid (for pH-adjustment)

Sodium hydroxide (for pH-adjustment)

6.2 Incompatibilities

Pemetrexed is physically incompatible with diluents containing calcium, including lactated Ringer's injection and Ringer's injection. In the absence of other compatibility studies this medicinal product must not be mixed with other medicinal products than described in section 6.6.

6.3 Shelf life

Unopened vial

100 mg: 3 years

500 mg: 3 years

Reconstituted and infusion solutions

When prepared as directed, reconstituted and infusion solutions of pemetrexed contain no antimicrobial preservatives. Chemical and physical in-use stability of reconstituted and infusion solutions of pemetrexed were demonstrated for 24 hours at refrigerated temperature. From a microbiological point of view, the product should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and would not be longer than 24 hours at 2°C to 8°C.

6.4 Special precautions for storage

Unopened vial

This medicinal product does not require any special storage conditions.

For storage conditions after reconstitution of the medicinal product, see section 6.3.

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6.5 Nature and contents of container

PEMETREXED 100 EURODRUG 100 mg powder for concentrate for solution for infusion

Type I glass 10 mL vial, containing 100 mg of pemetrexed, with a rubber-stopper (bromobutyl- or chlorobutyl elastomer, coating of e.g. Teflon), an aluminium cap and an ivory flip-top.

PEMETREXED 500 EURODRUG 500 mg powder for concentrate for solution for infusion

Type I glass 25 mL vial, containing 500 mg of pemetrexed, with a rubber-stopper (bromobutyl- or chlorobutyl elastomer, coating of e.g. Teflon), an aluminium cap and a blue flip-top.

Pack of 1 vial.

6.6 Special precautions for disposal and other handling

1. Use aseptic technique during the reconstitution and further dilution of pemetrexed for intravenous infusion administration.
2. Calculate the dose and the number of pemetrexed vials needed. Each vial contains an excess of pemetrexed to facilitate delivery of label amount.

3. PEMETREXED 100 EURODRUG

Reconstitute 100-mg vials with 4.2 ml of sodium chloride 9 mg/ml (0.9%) solution for injection, without preservative, resulting in a solution containing 25 mg/ml pemetrexed.

PEMETREXED 500 EURODRUG

Reconstitute 500-mg vials with 20 ml of sodium chloride 9 mg/ml (0.9%) solution for injection, without preservative, resulting in a solution containing 25 mg/ml pemetrexed.

Gently swirl each vial until the powder is completely dissolved. The resulting solution is clear and ranges in colour from colourless to yellow or green-yellow without adversely affecting product quality. The pH of the reconstituted solution is between 6.6 and 7.8. **Further dilution is required.**

4. The appropriate volume of reconstituted pemetrexed solution must be further diluted to 100 ml with sodium chloride 9 mg/ml (0.9%) solution for injection, without preservative, and administered as an intravenous infusion over 10 minutes.

5. Pemetrexed infusion solutions prepared as directed above are compatible with polyvinyl chloride and polyolefin lined administration sets and infusion bags.

6. Parenteral medicinal products must be inspected visually for particulate matter and discolouration prior to administration. If particulate matter is observed, do not administer.

7. Pemetrexed solutions are for single use only. Any unused medicinal product or waste material must be disposed of in accordance with local requirements.

Preparation and administration precautions

As with other potentially toxic anticancer agents, care should be exercised in the handling and preparation of pemetrexed infusion solutions. The use of gloves is recommended. If a pemetrexed solution contacts the skin, wash the skin immediately and thoroughly with soap and water. If pemetrexed solutions contact the mucous membranes, flush thoroughly with water. Pemetrexed is not a vesicant. There is not a specific antidote for extravasation of pemetrexed. There have been few reported cases of pemetrexed extravasation, which were not assessed as serious by the investigator. Extravasation should be managed by local standard practice as with other non-vesicants.

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7. **MARKETING AUTHORISATION HOLDER**

Imported and distributed by

Pacific Healthcare (Thailand) Co., Ltd.

1011 Supalai Grand Tower, Room no.01, 29th floor

Rama 3 Road, Chongnonsee, Yannawa

Bangkok, 10120, Thailand.

Manufactured by

Oncomed Manufacturing a.s.

Karásek 2229/1b, budova 02

Reckovice, 621 00 Brno

Czech Republic

8. **MARKETING AUTHORISATION NUMBER**

[To be completed nationally]

9. **DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

[To be completed nationally]

10. **DATE OF REVISION OF THE TEXT**

22 September 2022