American Society of Clinical Oncology
www.asco.org

Variation of the Induction Effect of Ifosfamide in 7 Children During a 5 Day Continuous Infusion Over 4 Treatment Sessions.

Sub-category:
Developmental Therapeutics - Clinical Pharmacology and Immunotherapy

Category:
Developmental Therapeutics

Meeting:
2000 ASCO Annual Meeting

Abstract No:
843

Citation:
Proc Am Soc Clin Oncol 19: 2000 (abstr 843)

Author(s):
B Gourmel, S Denis, N Delepine

Abstract:

7 patients (6 - 21 yr.) suffering from bone and soft tissue sarcoma, were followed over 4 months, during their 5-day treatment (tt) session by ifosfamide (If.) 3g/m^2/day. We estimate the variations of If., and its metabolites 2 d-If., 3 d-If. and mainly 4 OH-If. using a GC/NPD technic[2]. Pharmacokinetic analysis was performed to estimate daily AUC for each compound during each tt session. The percentage of induction (PI) for If. was defined as $Conc._{24}$ / $Cone._{120}$ & daily metabolite index (MI) as AUC metabolite/AUC If. The 4 tt session profiles of If. showed a similar shape: levels raised to a Cmax reached at the end of day 1, & then regularly decreased to reach a steady state, on day 5. The PI were respectively: 33.6%¦20.2, 41.9%¦18.4, 48.0%¦33.4 and 48.9%¦31.2. No statistical significant difference (t test) was shown between sessions 1 to 4 either for the blood levels niether for the PI. The daily MI for inactive metabolites showed a continuous increase during the infusion duration over each tt sessions. For 2d-If., the last day MI were 18.5%¦18.7, 18.0%¦10.2, 17.3%¦9.9 and 16.8%¦ 9.8 and for 3d-If. 22.9%¦5.0, 21.8%¦5.8, 21.0%¦7.9 and 19.8%¦6.3 (not significantly different: t test). The active metabolite 4OH If. blood levels remained low during the entire infusion. The MI increase of 4OH-If. during the infusion was observed for any of the studied tt sessions. 4OH-If. last day MI were respectively 2.3%¦0.8, 2.0%¦0.6, 2.1%¦0.5 and 1.8%¦0.5 for the different sessions, (not significantly different, whatever tt session considered). Such regimen confirmed a relevant induction phenomenon in children during the 4 sessions. Each MI increase during the duration of the infusion, was mainly due to a decrease of the If. rather than a relevant increase of the metabolites blood levels. For 4OH-If., a more significative blood level increase was noted. Therefore, the global induction process remains especially favorable for the 4OH-If. pathways. These data did not permit to demonstrate a statistical significative difference for the different sessions. (Supported by a "Ligue nationale Paris" grant N¦98/RS-PH/86). [2]Gourmel & al. J. Chromatogr B. 1999; 732 (1) :3-15.

Associated Presentation(s):

No items found.

Other Abstracts in this Sub-Category:

1. Intermittent Oral ZD1839 (Iressa), a Novel Epidermal Growth Factor Receptor Tyrosine Kinase Inhibitor (EGFR-TKI), Shows Evidence of Good Tolerability and Activity: Final Results from a Phase I Study

Meeting: 2000 ASCO Annual Meeting Abstract No: 5E First Author: D Ferry
Category: Developmental Therapeutics - Developmental Therapeutics - Clinical Pharmacology and Immunotherapy

2. A PHASE I AND PHARMACOKINETIC (PK) STUDY OF THE FARNESYLTRANSFERASE INHIBITOR, R115777 IN COMBINATION WITH GEMCITABINE (Gem).

Meeting: 2000 ASCO Annual Meeting Abstract No: 5A First Author: Amita Patnaik
Category: Developmental Therapeutics - Developmental Therapeutics - Clinical Pharmacology and Immunotherapy

3. Persistent and Marked Inactivation of O-6-Alkylguanine-DNA Alkyltransferase (AGAT), a Mechanism of Resistance to Alkylators, with Protracted Low-Dose Oral Schedules of Temozolamide.

Meeting: 2000 ASCO Annual Meeting Abstract No: 680 First Author: Anthony Tolcher
Category: Developmental Therapeutics - Developmental Therapeutics - Clinical Pharmacology and Immunotherapy

More...

Abstracts by B Gourmel:

1. Adjustment of DOSE of ifosfamide (If.) in children after the first treatment session.

Meeting: 2008 ASCO Annual Meeting Abstract No: 10038 First Author: B. Gourmel III
Category: Pediatric Oncology - Pediatric Solid Tumors

2. Ifosfamide given once every other week: A clinical and pharmacological study.

Meeting: 2007 ASCO Annual Meeting Abstract No: 13008 First Author: W. Cacheux
Category: Developmental Therapeutics - Clinical Pharmacology and Immunotherapy - Pharmacology/Pharmacokinetics

3. Pharmacokinetic evaluation of the Auto-Inductive effect of a single dose of Ifosfamide administred each 15 days

Meeting: 2005 ASCO Annual Meeting Abstract No: 2111 First Author: b. gourmel
Category: Developmental Therapeutics - Clinical Pharmacology and Immunotherapy - Pharmacology/Pharmacokinetics

More...

Presentations by B Gourmel:

1. Adjustment of DOSE of ifosfamide (If.) in children after the first treatment session.

Meeting: 2008 ASCO Annual Meeting
Presenter: Bernard Gourmel, MD
Session: Pediatric Cancer (General Poster Session)

2. Variation of the metabolite index of ifosfamide metabolites during a 5-day continuous injection in children

Meeting: 2003 ASCO Annual Meeting
Presenter: Bernard Gourmel, MD
Session: Pediatric Oncology: Leukemia and Developmental Therapeutics (General Poster Session)

3. Comparaison Of The Induction Effect Of Ifosfamide In Children And Adult Population During Continuous Infusion. Consequences On Its Metabolites

Meeting: 2001 ASCO Annual Meeting
Presenter: Bernard Gourmel

Session: Clinical Pharmacology (General Poster Session)

More...

▸ ***Educational Book Manuscripts by B Gourmel*:**

No items found.