

MERCK RESEARCH LABORATORIES
Division of Merck & Co., Inc.
West Point, Pennsylvania 19486

December 15, 2008

Re: blinded therapy/MK-0683

Dear Doctor:

This letter is to provide follow-up information on an adverse experience concerning blinded MK-0683 which has been reported to you previously.

U.S. Food and Drug Regulations require sponsors of clinical studies conducted under an IND to notify the FDA of any serious and unexpected adverse experiences occurring in a clinical study filed under that IND when either the investigator or the sponsor believes that there is a reasonable possibility that the experience may have been drug related or if the drug relationship is unknown. The sponsor is also required to inform all investigators working with the particular drug under the IND.

In compliance with these requirements, the enclosed report has been submitted to the FDA and, because you are an investigator in a clinical study under this IND, a copy is enclosed for your information.

Please append this report to the Confidential Investigator's Brochure for the appropriate investigational product or to the Product Circular for the appropriate marketed product and retain in your files.

Please submit a copy of this report promptly (within less than 30 days of receipt) to your Institutional Review Board(s) even though the report may not involve a patient in your study.

This report does not necessarily reflect a conclusion by Merck or the FDA that the drug caused or contributed to the adverse experience. If you have any questions about this report, please contact the Merck monitor for your study.

Enclosure(s): WAES # 0802USA04821, GENSTUDY # 056-0096, AN # 63507

MedWatch

The FDA Medical Products Reporting Program

Merck Human Health Division

For use by user-facilities,
distributors and manufacturers for
MANDATORY reporting

Page 1

Merck Facsimile of FDA Form 3500A
Approved by FDA (10/21/1993)

Mfr report #	WAES 0802USA04821
UF/Dist report #	
FDA Use On	

A. Patient information			
1. Patient identifier Confidential AN 63507 in confidence	2. Age at time of event: or 64 years Date of Birth: 11/23/1943	3. Sex <input checked="" type="checkbox"/> Female <input type="checkbox"/> Male	4. Weight 132 lbs
B. Adverse event or product problem			
1. <input checked="" type="checkbox"/> Adverse event and / or <input type="checkbox"/> Product problem (e.g., defects/malfunctions)			
2. Outcomes attributed to adverse event (check all that apply)			
<input type="checkbox"/> Death (mm/dd/yyyy)		<input type="checkbox"/> Disability or Permanent Damage	
<input type="checkbox"/> Life-threatening		<input type="checkbox"/> Congenital Anomaly/Birth Defect	
<input checked="" type="checkbox"/> Hospitalization-initial or prolonged		<input type="checkbox"/> Other Serious(Important Medical Events)	
<input type="checkbox"/> Required Intervention to Prevent Permanent Impairment/Damage (Devices)			
3. Date of event (mm/dd/yyyy) 02/17/2008		4. Date of this report (mm/dd/yyyy) 12/15/2008	
5. Describe event or problem			
This is in follow-up to report(s) previously submitted on 2/29/2008; 3/20/2008; 3/26/2008; 4/15/2008; 5/5/2008; 8/29/2008; 11/7/2008; 11/12/2008; 12/5/2008			
A Phase II/III Randomized, Double-Blind Study of Paclitaxel plus Carboplatin in Combination with Vorinostat (MK-0683) or Placebo in Patients with Stage IIIB (with pleural effusion) or Stage IV Non-Small-Cell Lung Cancer (NSCLC)			
Initial and follow up information has been received from an investigator concerning a 64 year old Asian female with vomiting and a history of hemoptysis and toothache who entered a study, title as stated above who was randomized on 07-FEB-2008. On 07-FEB-2008, the patient was placed on blinded study therapy with either vorinostat, capsule, 400 mg or placebo administered on days -4 through 10 of cycle 1 (cycle equivalent to 25 days) for the treatment of non-small cell lung cancer (diagnosed on 11-NOV-2007, T2 N2 M1, stage 4 Adenocarcinoma).			
(Continued on Additional Page)			
6. Relevant tests/laboratory data, including dates			
Refer to Additional Page			
7. Other relevant history, including preexisting medical conditions (e.g., allergies, race, pregnancy, smoking and alcohol use, hepatic/renal dysfunction, etc.)			
MEDICAL HISTORY: Haemoptysis; Toothache CONCURRENT CONDITIONS: Vomiting; Prophylaxis of nausea and vomiting			

C. Suspect medication(s)			
1. Name (Give labeled strength & mfr/labeler)			
# 1 CAP 0683-blinded therapy Unk			
# 2 INJ carboplatin Unk			
(Continued on Additional Page)			
2. Dose, frequency & route used		3. Therapy dates (if unknown, give duration) from/to (or best estimate)	
# 1 400 mg/DAILY/PO		# 1 02/07/2008 - 02/20/2008	
# 2 684 mg/1X/IV		# 2 02/13/2008 - 02/13/2008	
4. Diagnosis for use (indication)		5. Event abated after use stopped or dose reduced.	
# 1 Non-small cell lung cancer		yes no N/A unk	
# 2 Non-small cell lung cancer		# 1 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
		# 2 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
6. Lot #		7. Exp. Date	
# 1		# 1	
# 2		# 2	
9. NDC # or Unique ID		8. Event reappeared after reintroduction.	
Unknown		yes no N/A unk	
# 1		# 1 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
# 2		# 2 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
10. Concomitant medical products and therapy dates (excluded treatment of event)			
BENADRYL		02/13/2008-02/13/2008	
STEMETIL		02/13/2008-02/17/2008	
(Continued on Additional Page)			

G. All manufacturers	
1. Contact office - name/address	2. Phone Number
Merck Human Health Division Merck & Co., Inc. P.O. Box 4 West Point, Pa. 19486-0004 Attn: World Wide Product Safety	(215) 652-8071
4. Date received by manufacturer (mm/dd/yyyy) 12/06/2008	3. Report source. (check all that apply)
6. If IND, protocol # 0560096	<input checked="" type="checkbox"/> foreign
7. Type of report	<input checked="" type="checkbox"/> study
<input type="checkbox"/> 5-day <input type="checkbox"/> 30-day	<input type="checkbox"/> literature
<input type="checkbox"/> 7-day <input type="checkbox"/> Periodic	<input type="checkbox"/> consumer
<input type="checkbox"/> 10-day <input type="checkbox"/> Initial	<input checked="" type="checkbox"/> health professional
<input checked="" type="checkbox"/> 15-day <input checked="" type="checkbox"/> Follow-up# 9	<input type="checkbox"/> user facility
5. (A)NDA # 58915	<input type="checkbox"/> company representative
IND # 58915	<input type="checkbox"/> distributor
STN #	<input type="checkbox"/> other:
PMA/ 510(k) #	
Combination Product <input type="checkbox"/> Yes	
Pre-1938 <input type="checkbox"/> Yes	
OTC product <input type="checkbox"/> Yes	
9. Mfr. report number	
WAES 0802USA04821	
8. Adverse event term(s)	
HYPONATRAEMIA; FEBRILE NEUTROPENIA	

E. Initial reporter			
1. Name, address & phone #			
2. Health professional?	3. Occupation	4. Initial reporter also sent report to FDA.	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> unk	

FDA Submission of a report does not constitute an admission that medical personnel, user facility, distributor, manufacturer or product caused or contributed to the event.

B. Adverse event or product problem

5. Describe event or problem

Concomitant suspect study therapy carboplatin AUC equivalent to 6 (684 mg), and paclitaxel 200 mg/m² (320), administered IV on day 1 of each treatment cycle. Other concomitant therapy included ondansetron HCL (ZOFTRAN), diphenhydramine (BENADRYL), dexamethasone (manufacturer unknown), ranitidine, tramadol hydrochloride (TRAMAL) and prochlorperazine maleate (STEMETIL).

On 17-FEB-2008 (cycle 1, day 10) the patient experienced hyponatremia (sodium was 105 mmol/L) (grade 4) and was hospitalized. On 18-FEB-2008, (cycle 1, day 11) the patient experienced fatigue and vomiting. Laboratory evaluation on 18-FEB-2008 revealed serum sodium was 115 mmol/L (also reported as 110 mmol/L) and white blood count was 4400/uL. She was treated with 3 percent sodium chloride intravenously. On 19-FEB-2008 patient experienced hyponatremia sodium was 123 (grade 3) (NSAE). She was treated with 5% dextrose in normal saline IV 80cc/hr (19-FEB-2008 to 27-FEB-2008). It was also reported that the patient had fever on 19-FEB-2008 and laboratory result of complete blood count (CBC) and white blood count (WBC) were low. On 20-FEB-2008, the patient completed cycle 1 of study therapy. On 21-FEB-2008, the patient experienced severe febrile neutropenia (grade 3) (NSAE). WBC was 1100/ul, neutrophil was 54% and absolute neutrophil count (ANC) was 594. Chest x-ray showed lungs were clear and no culture was done. The patient was treated with cefepime (22-FEB-2008 to 28-FEB-2008). On 21-FEB-2008 patient experienced hyponatraemia (grade 1) (NSAE). On 21-FEB-2008 patient's serum sodium was 131 mmol/L. On 23-FEB-2008 the patient experienced hyponatremia (sodium was 127) (grade 3) (NSAE). On 27-FEB-2008, the patient's serum sodium level was 136 mmol/L.

On 21-FEB-2008 patient recovered from hyponatremia (grade 3) (NSAE). On 23-FEB-2008 patient recovered from hyponatremia (grade 1) (NSAE). On 27-FEB-2008 she recovered with sequelae from hyponatremia (grade 3) (NSAE). On 28-FEB-2008 the patient recovered from severe febrile neutropenia ((grade 3). The investigator considered severe febrile neutropenia as event of clinical interest (ECI).

On 29-FEB-2008, the patient recovered from hyponatremia (grade 4) and was discharged from the hospital. Discharge diagnosis was hyponatremia. On 05-MAR-2008, the patient was discontinued from the study due to the adverse event. Action taken for blinded study therapy, carboplatin and paclitaxel was discontinued.

The reporting investigator felt that the hyponatremia (grade 4) and severe febrile neutropenia (grade 3) (ECI) were related to blinded study therapy. Hyponatremia (grade 1), Hyponatremia (grade 3) (NSAE) were related to study therapy.

Additional information is not expected.

6. Relevant tests/laboratory data, including dates

DIAGNOSTIC TEST

Tests	Date	Value	Unit	Normal Range
chest X-ray	02/21/2008			
Comment: Lungs clear				

LABORATORY RESULTS

Tests	Date	Value	Unit	Normal Range
serum sodium	02/17/2008	105	mmol/L	135 - 145
WBC count	02/18/2008	4400	/ul	4500 - 11000
absolute neutrophil count	02/18/2008	3687		
serum sodium	02/18/2008	110	mmol/L	135 - 145
Comment: hyponatremia grade 3				
serum sodium	02/18/2008	105	mmol/L	135 - 145
Comment: hyponatremia grade 3				
serum sodium	02/18/2008	115	mmol/L	135 - 145
Comment: hyponatremia grade 3				
serum sodium	02/19/2008	123	mmol/L	135 - 145
WBC count	02/21/2008	1100	/ul	4500 - 11000
absolute neutrophil count	02/21/2008	660		
neutrophil count	02/21/2008	54	%	
serum sodium	02/21/2008	131	mmol/L	135 - 145
WBC count	02/23/2008	1100		
absolute neutrophil count	02/23/2008	594		
serum sodium	02/23/2008	127	mmol/L	135 - 145
absolute neutrophil count	02/27/2008	3709		
serum sodium	02/27/2008	136	mmol/L	135 - 145
WBC count	02/29/2008	5400		

C. Suspect medication(s)

1. Name (Give labeled strength & mfr/labeler)

#3 paclitaxel Unk

2. Dose, frequency & route used

#3 320 mg/1X/IV

3. Therapy dates (if unknown, give duration) from/to (or best estimate)

#3 02/13/2008 - 02/13/2008

4. Diagnosis for use (indication)

#3 Non-small cell lung cancer

5. Event abated after use stopped or dose reduced

YES NO N/A UNK

#3 X

6. Lot # (if known)

#3

7. Exp date (if known)

#3

8. Event reappeared after reintroduction

YES NO N/A UNK

#3 X

C. Suspect medication(s)

10. Concomitant medical products and therapy dates (exclude treatment of event)

TRAMAL	02/13/2008 - Cont
dexamethasone	02/13/2008 - 02/13/2008
ondansetron	02/13/2008 - 02/13/2008
ondansetron	02/13/2008 - 03/04/2008
ranitidine	02/13/2008 - 02/13/2008