



**U.S. DEPARTMENT OF STATE
OPERATION PROVIDE HOPE**

MONITORING REPORT

Humanitarian Medical Delivery

Kyrgyz Republic

August 2008

Submitted by:



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Implementing Partner:	CitiHope International
Shipment Date:	April 18, 2007
Receipt Date:	April 24, 2007
Inventory:	May 04, 2007
Targeted group:	approximately 7,200 patients
Total value:	\$ 2,668,039.93

Introduction:

In 2007, under the Operation Provide Hope, U.S. State Department humanitarian program, CitiHope International, an American PVO, delivered to Kyrgyzstan a humanitarian shipment of the antibiotics Rocephin and Vancomycin.

Rocephin was donated to the USDOS program for Kyrgyzstan through the auspices of Project Hope/Roche. Vancomycin was donated by Hospira, Inc.

Rocephin belongs to a group of cephalosporins, 3rd generation, used for treatment of severe infections. Vancomycin belongs to a group of glycopeptids and is a single antibiotic recommended for treatment of infections caused by MRSA, and is also used for patients who have received unsuccessful penicillin treatment. Delivered quantities comprised: Rocephin – 70,000 vials, 1g and 0.5 g; Vancomycin – 10,000 vials, 1 g and 0.5 g.

In April-May, 2007 thirty three medical institutions, including national centers, oblast and rayon hospitals received these two medicines: 17 hospitals located in Bishkek and Chui oblast, 13 - in Osh oblast and 3 hospitals in Naryn oblast.

Physicians' Education on Rational Use of Antibiotics:

Along with medical deliveries CitiHope prioritizes promotion of rational drug usage by educating physicians in recipient hospitals on usage of humanitarian drug donations.

In May-June 2007 CHI conducted training seminars for physicians on Rocephin and Vancomycin usage. The training seminar included the following topics:

- quality assurance of medical service by rational use of antibiotics
- rational usage of Rocephin and Vancomycin
- control of antibiotics resistance by their rational usage

Education on rational drug usage included the following aspects:

1. main principals of rational drug usage
2. detailed instructions on Rocephin and Vancomycin usage
3. continual informational support for physicians on usage of Rocephin and Vancomycin

143 physicians received training -- 65 physicians from Bishkek City and Chui oblast and 78 physicians from Osh oblast.

Rocephin and Vancomycin Usage Monitoring:

In March-April 2008, CHI conducted monitoring of Rocephin and Vancomycin usage in recipient- hospitals, included the following components:

- Hospital visits and antibiotics usage observation;
- Rocephin and Vancomycin monitoring of usage registration records;
- Physicians' skills monitoring on usage of Rocephin and Vancomycin;
- Rocephin and Vancomycin prescribing practice monitoring by checking patient cards.

Monitoring Results

Visits to hospitals

Nine hospitals in Bishkek and seven hospitals in Osh oblast were visited. Humanitarian donated antibiotics were stored in appropriate conditions. There were no cases of inappropriate usage identified. Informational posters for patients on donated Rocephin and Vancomycin were displayed in monitored hospitals.

Evaluation of Rocephin and Vancomycin registration records

Humanitarian aid registration records on Rocephin and Vancomycin usage were properly filled out in all hospitals, including patient name, patient medical card number and quantity of prescribed antibiotic.

Evaluation of physicians' skills on Rocephin and Vancomycin usage

Assessment of physicians' skills on Rocephin and Vancomycin usage was conducted using a specifically developed questionnaire. 71 physicians from 18 recipient-hospitals participated in this exercise.

Table 1. Monitored Hospitals and Physicians

Hospitals	Number of monitored physicians	%
Bishkek hospitals		
National Hospital	5	7.0%
National Maternal and Child Health	3	4.2%
National Oncology Center	5	7.0%
Bishkek Hospital No. 1	7	9.9%
Bishkek Child Emergency Hospital	11	15.5%
Bishkek Perinatal Centre	1	1.4%
Bishkek Trauma Research Centre	6	8.5%
Republican Communicable Disease Hospital	2	2.8%
National Hematology Centre	3	4.2%
Osh oblast hospitals		
Uzgen Territorial Hospital	4	5.6%
Aravan Territorial Hospital	5	7.0%
Nookat Territorial Hospital	3	4.2%
Osh Interregional Child Hospital	5	7.0%
Osh Oblast Hospital	3	4.2%
Karasuu Child Hospital	3	4.2%
Karasuu Territorial Hospital	5	7.0%
Total	71	100.0%

Analysis of physicians' answers demonstrated the following results:

- 64% of physicians have chosen correct indications for prescribing Rocephin;
- 54% of physicians have chosen correct dosage of Rocephin;
- 17% of physicians have chosen correct indications for prescribing Vancomycin;
- 63% of physicians have chosen correct route of administration for Vancomycin.

Assessment of Rocephin and Vancomycin Prescribing Practices in Patient Cards

186 patients' cards from 18 hospitals with Rocephin and Vancomycin prescribing were reviewed in order to assess their rational usage.

Table 2. Hospitals and number of reviewed patient cards

Hospitals	Number	%
Bishkek hospitals		
National Hospital	18	9.7%
National Oncology Centre	5	2.7%
Republican Communicable Disease Hospital	6	3.2%
Bishkek Hospital No. 1	10	5.4%
Bishkek Child Emergency Hospital	37	19.9%
Bishkek Perinatal Centre	11	5.9%
Bishkek Trauma Research Centre	15	8.1%
National Cardiology and Therapy Centre	5	2.7%
National Hematology Centre	11	5.9%
Osh oblast hospital		
Nookat Territorial Hospital	4	2.2%
Osh Interregional Child Hospital	14	7.5%
Osh Oblast Hospital	11	5.9%
Uzgen Territorial Hospital	12	6.5%
Karakuldja Hospital	6	3.2%
Karasuu Child Hospital	8	4.3%
Karasuu Territorial Hospital	6	3.2%
Total	186	100.0%

Retrospective analysis of patients' cards has shown the following results:

- average age of patients managed by Rocephin and Vancomycin is 28 years;
- the correct dosage of Rocephin is indicated in 47% patients cards;
- the correct dosage of Vancomycin is indicated in 50% of patients cards.

Conclusion

Rocephin and Vancomycin are new antibiotics for physicians in the Kyrgyz Republic. It is necessary to maintain continuous informational support on usage of these antibiotics in order to improve physicians prescribing skills in achieving effective treatment of patients.

Overall, humanitarian donation of Rocephin and Vancomycin allowed achieving the following results:

- provided effective treatment for patients with severe infection diseases;
- educated physicians to use modern antibiotics and raised their knowledge and skills;

It is highly desirable to continue donations of these drugs to Kyrgyzstan to improve quality of medical service and population's health.