

Standard Summary Project Fiche – IPA Decentralised National Programmes

1. Basic information

- 1.1 CRIS Number: TR2010/0312.01
- 1.2 Title: Oral Vaccination Against Rabies
- 1.3 Statistical Code: 12 Food safety, veterinary, phytosanitary policy

1.4 Location: Turkey

Implementing arrangements:

1.5 Implementing Agency:

The CFCU will be the Implementing Agency and will be responsible for all procedural aspects of the tendering process, contracting matters and financial management, including payment of project activities. The director of the CFCU will act as the Programme Authorizing Officer (PAO) of the project. The contact details of the CFCU Director are given below:

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1.6 Beneficiary:

The General Directorate of Protection and Control (GDPC) under the Ministry of Agriculture and Rural Affairs will be the beneficiary of the project.

The Senior Programme Officer of the Project will be the Head of the Department for Animal Health Services of the General Directorate of Protection and Control, whose contact details are given below.

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Financing:

1.7 Overall cost (VAT excluded)¹: 2,200,000 Euros

¹ The total cost of the project should be net of VAT and/or other taxes. Should this not be the case, the amount of VAT and the reasons why it should be considered eligible should be clearly indicated (see Section 7.6)

- 1.8 EU contribution: 1,870,000 Euros
- 1.9 Final date for contracting: 2 years after the signature of the financing agreement
- 1.10 Final date for execution of contracts: 2 years following the end date for contracting
- 1.11 Final date for disbursements: 1 year after the end date for the execution of contracts

2. Overall Objective and Project Purpose

2.1 Overall Objective:

The overall objective of the project is to decrease the incidence of urban and sylvatic rabies, with a view for the eradication of the disease in Turkey, and to ensure a human and animal health status, similar to that in the EU.

As Turkey will gain experience regarding the eradication of rabies with the implementation of this project this will enable the implementation of control measures and administration of vaccines for proper control. The utilization of national resources to control 'Rabies' will be explored for future eradication of animal diseases.

2.2 Project purpose:

The project is aimed at the control of sylvatic rabies in wild carnivore animals, and thereby the reduction of the risk of farm animals and humans becoming infected with rabies.

2.3 Link with AP/NPAA / EP/ SAA

2.3.1. Link with Accession Partnership

The project addresses the medium-term priority related to the ability to assume obligations of membership under Chapter 12 Food Safety, Veterinary and Phytosanitary Policy, namely, adopting control measures for animal diseases and setting up eradication plans where this is justified by the animal health situation, in the 2008 Accession Partnership Document.

2.3.2. Link with NPAA

The project addresses Priority 12.5 titled "Adopting control measures for animal diseases and set up eradication plans where this is justified by the animal health situation" under Chapter 12 Food Safety, Veterinary and Phytosanitary Policy of the 2008 NPAA.

2.4 Link with MIPD

The Project addresses the priority of "eradication of animal diseases, continuing on-going programmes related to the eradication of rabies, FMD"

indicated in the 2009-2011 MIPD.

2.6 Link with sectoral policies, strategies and implementation plans

The project is consistent with established government policies. The project is in line with the animal disease control strategy of MARA

3. Description of project

3.1 Background and justification:

In the past, dog-mediated rabies dominated the country with incidental spill-over infections in other domestic animals (e.g. cats and livestock), wildlife (e.g. jackals, foxes, wolves, mustelids) and humans. The present situation is characterized with a decrease in the number of dog rabies and human rabies cases and an increase in the number of wildlife rabies cases (particularly as a result of a sustained spill-over from dogs to foxes in the Aegean region). Despite the decrease in the number of dog rabies cases, the vaccination coverage is still much too low in many areas, which needs to be improved, independently from the general issue of responsible dog population management. Except for the fox rabies outbreak in the Aegean region there is still no convincing evidence that wildlife rabies has established itself firmly in other regions of Turkey. There are only incidental cases or self-limited outbreaks (e.g. jackals in Kastamonu).

An increasing number of rabies cases have been reported in the Aegean (western) region of Turkey. The virus appears to have maintained a foothold in the urban areas of the province of İzmir with only three cases per year being reported during the mid-1990s. Since 2001, the virus has been recorded in the previously rabies-free provinces of Manisa and Aydın. During this epizootic, cases have been reported in both dogs and foxes, and there has been an unusually high incidence of rabies in domestic livestock, especially cattle.

Wildlife rabies mainly occurs in foxes in the Aegean region (Aydın, İzmir, Manisa, Muğla provinces), while jackals are the main source of wildlife rabies in the Anatolia part of İstanbul. In Eastern Anatolia (Erzurum, Erzincan, Ağrı, Van, Hakkari provinces) wolves are the main source of the disease. In South-eastern Anatolia (Gaziantep, Kilis, Şanlıurfa, Hatay provinces) foxes and jackals from neighbouring countries are the main source of the disease. The number of wildlife rabies cases, which was only 1 in 1999, has increased to 12 in 2000, 16 in 2001, 33 in 2002 and 17 in 2003. The disease, which has both social and economic consequences, threatens neighbouring European countries.

The wildlife rabies outbreak in the Aegean region, starting in 1999, rapidly spread in southern and eastern direction. The oral rabies vaccination area (36,000 km²) has been covered three times under the ongoing project TR 0503.06 Control of Rabies Disease in Turkey, and the rabies situation has improved considerably. In 2008, the year when the first oral vaccination campaign took place, almost 30 rabid foxes were reported within the vaccination area. In 2009 (till October) only 3 fox rabies cases were reported close to the northern border

of the vaccination area in İzmir and Manisa. Furthermore, 13 additional foxes were examined for rabies antibodies due to the uptake of an oral rabies vaccine bait. All 13 foxes tested rabies negative and 11 blood samples were examined; 8 of these samples (72%) had rabies virus neutralizing antibodies indicating the consumption of an oral rabies bait, underscoring the effectiveness of this method.

The preliminary results indicate that the oral vaccination efforts in wildlife were highly successful. Already after 2 annual campaigns no further fox rabies cases were reported from the vaccination area. Unfortunately, the post-campaign surveillance data is limited in terms of the low number of foxes submitted. If these positive results are confirmed in the near future the extensive cattle vaccination campaigns (450,000 doses) in this area can be discontinued. However, dog rabies has not been eliminated yet and therefore, dog vaccination campaigns must be conducted without interruption.

Unfortunately, fox rabies has spread outside the vaccination area and is now firmly established in Burdur and Isparta. In 2008, the number of rabies positive cases in this area were 13 in cattle, 2 in dogs and 2 in foxes, whilst in 2009 (till October) the numbers were 23 in cattle, 5 in dogs, 5 in foxes and 6 in other wildlife species.

A major problem related to the surveillance of wildlife rabies is obtaining samples. Examining animals shot by hunters alone will most likely not be of much help; these animals are hardly ever diagnosed rabies positive. The most important indicator animals are animals found dead or showing abnormal behaviour. In areas with a low human population these animals will only rarely be encountered and handed over for rabies diagnosis. In certain areas, a sudden high number of rabies cases among livestock can be indicative for rabies among wildlife. However, the importance of the post vaccination testing was consulted with the Ministry of Environment and Forestry and close corporation is envisaged.

As mentioned above, there is still little evidence that rabies has established itself firmly in wildlife. Only incidental spill-over infections are reported. There is sufficient evidence only in the Aegean region that rabies established itself firmly in the wildlife population and is spreading rapidly from the west coast to Central Anatolia. This incident clearly demonstrated that such an outbreak could happen also in other regions of Turkey. The outbreak in the Aegean region was identified as such already in 2002 but the first oral vaccination campaign did not take place until 2008. Consequently, fox rabies had spread over a large area and the vaccination area was also much larger in 2008 than would have been required in 2002.

It has been suggested to determine the population densities of certain potential rabies wildlife reservoir species (fox, jackal). The only easily accessible index figure is the hunting bag (number of animals shot). However, this number is not available in Turkey. Other estimates can only be obtained by intensive field

work and can most of the time not be extrapolated to other areas and are therefore of limited use.

Oral vaccination has been concluded to be highly successful in controlling fox rabies. However, the selected vaccination area under the 2005 project was small and fox rabies had already spread outside this area. Presently, fox rabies is a major problem in Burdur and Isparta. Also here the number of rabies cases among cattle has increased dramatically. The main problem is that a delay in the distribution of vaccine baits in the infected area could result in the spread of the disease to other areas.

Turkey borders many countries where rabies is endemic in dog and wildlife populations. To circumvent re-infection the border regions could be vaccinated annually (50-km zone) by distributing oral rabies vaccine baits to protect the free-roaming wildlife from re-infection when rabies infected animals cross the border. Furthermore, the dog population in this area should also be vaccinated annually. However, it must be stressed that dog rabies control is the key to long-term success.

The Screening Report of Turkey on Chapter 12 reads “The current animal health situation in Turkey is very critical and risks remaining for a long period. A number of diseases listed by OIE are endemic. Adequate administrative capacities to handle control measures for animal diseases are limited. Turkey's large borders create a major supplementary risk in the animal health area which needs to be tackled in close cooperation with neighbouring countries and international organisations.”

A Working Group Meeting on Animal Health between the European Commission and Turkish officials took place in Amasya, Turkey on 7-9 July 2009. The Working Group recommended the preparation of a project fiche concerning rabies control in wildlife. The project was decided to comprise of 3 annual campaigns of oral vaccination by distribution of vaccine baits at a density of 18 baits per km² in the Aegean Region.

3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)

EU financial assistance under IPA-I is essential for the control and eradication of rabies, in terms of the continuation and sustainability of the programme developed under project TR 0503.06. As explained under subtitle 3.1 Background and justification, the eradication of the disease not only bears significance for public health and animal health, but also constitutes a substantial economic and financial burden to Turkey. Without any intervention, the disease would spread nationwide and constitute a persistent threat to the human and animal population of the European Union.

The project has a long-term sustainability since the proper animal health status in the country with respect to the Rabies will enable proper level of human and animal health protection after the accession of Turkey to the EU. The competent authority will gain experience regarding the eradication of rabies and other animal diseases with the implementation of this project. The experience gained will enable the implementation of control measures and administration of vaccines for proper control. The utilization of national resources to control diseases will be explored for future eradication of animal diseases.

3.3 Results and measurable indicators:

Results and measurable indicators in relation with activity 1

Result No. 1-Immunity level against rabies infection of wild animals in defined areas in the Aegean region is essentially improved. The number of diagnosed rabies cases is declined.

Objectively Verifiable Indicators:

- Increase in rate of negative results in suspect wildlife samples sent to the laboratory between the years 2011-2014
- Statistically significant gradual increase in immunity levels determined by post-vaccination testing throughout the three-year implementation period of the project

3.4 Activities:

3.4.1. Supply of Vaccines to obtain Result No. 1 - vaccination campaign:

Procurement and provision of vaccine baits for oral vaccination of wild animals; the bait drop will be carried out in a territory of 84,000 km² once a year. Baiting density will be 18 baits per km² in the 1st, 2nd and 3rd years. (The vaccination cost is calculated through bait per 1 km²). Approximately 1,512,000 baits will be needed per year (84,000 km² x 18 bait/km²).

During the implementation period of the project 4,536,000 baits will be needed. (84,000 km² x 18 bait/km² x 3 years).

Vaccine baits will be distributed in the Aegean region and local areas with a high number of rabies cases in wildlife. Vaccine baits will be delivered to the Bornova Veterinary Control and Research Institute (VCRI), which is equipped with the necessary storage units which were built within the framework of the Project (No. 0503.06) Control of Rabies Disease in Turkey. These storage units have sufficient capacity to store all of the supplied baits. The capacity of the above mentioned storage unit is 50m³.

For the effectiveness of the vaccines it is important to realize the campaign during winter. The period of each campaign is two months. Implementation period will be planned according to weather conditions within these two months.

Means/Inputs

1 supply contract. Oral vaccine baits must be delivered at least three months before the start of the vaccination campaign.

3.5 Conditionality and sequencing:

Close corporation between MARA and relevant administration for post vaccination testing is critical for the project. To achieve this corporation a 'Protocol' or a Memorandum of Understanding should be signed with Ministry of Health and Ministry of Forestry and Environment to carry out post vaccination testing.

As known due to the experience gained from previous Rabies Projects, cost of flights are financed by national funds within a framework of a national tender. In the year 2008, 304 flight hours, in the years 2009, 330 flight hours, in the year 2010 316 flight hours were realized. Total Flight cost of the three campaigns were 1,400,000 TL, which was funded from the national sources. Also, within the project renting of planes/helicopters will be again financed by Turkish national funds.

3.6 Linked activities

Linked activities include two projects realized with EU financial assistance:

TR 0503.06 Control of Rabies Disease in Turkey

The ongoing project, which will be completed in 2010, includes four components, namely vaccination (parenteral vaccination of cats and dogs, parenteral vaccination of farm animals, oral vaccination of wild animals), strengthening of laboratories (strengthening of the national reference laboratory for rabies and increase of the vaccine storage capacity), construction of animal care units (construction of animal care units in Ankara, İzmir and İstanbul), and technical assistance (preparation of legislation, training of staff, survey planning, pilot projects).

TR 0203.05 Support to the Alignment of Turkey to the EU Veterinary Acquis

The objective of the project was to support the Turkish Ministry of Agriculture and Rural Affairs in aligning to the relevant EC standards of veterinary legislation and in activities related to animal health, veterinary public

health and animal welfare. The project included the following components:

- Animal Health
- Inspection System, Veterinary Information System, Disease Surveillance, Control and Eradication
- Veterinary Public Health
- Animal Welfare

3.7 Lessons learned

Based on experience gained during the implementation of Project No. 0503.06 for the control of rabies disease in Turkey, a major problem related to the surveillance of wildlife rabies is obtaining samples. Examining animals shot by hunters alone are considered not to be of much help; these animals are hardly ever diagnosed rabies positive. The most important indicator animals are animals found dead or showing abnormal behaviour. In areas with a low human population these animals will only rarely be encountered and handed over for rabies diagnosis. In certain areas, a sudden high number of rabies cases among livestock can be indicative for rabies among wildlife.

There is still little evidence that rabies has established itself firmly in wildlife. Only incidental spill-over infections are reported. There is sufficient evidence only in the Aegean region that rabies established itself firmly in the wildlife population and is spreading rapidly from the west coast to Central Anatolia. This incident clearly demonstrated that such an outbreak could happen also in other regions of Turkey. The outbreak in the Aegean region was identified as such already in 2002 but the first oral vaccination campaign did not take place until 2008. Consequently, fox rabies had spread over a large area and the vaccination area was also much larger in 2008 than would have been required in 2002.

It has been suggested to determine the population densities of certain potential rabies wildlife reservoir species (fox, jackal). The only easily accessible index figure is the hunting bag (number of animals shot). However, this number is not available in Turkey. Other estimates can only be obtained by intensive field work and can most of the time not be extrapolated to other areas and are therefore of limited use.

Oral vaccination has been concluded to be highly successful in controlling fox rabies. However, the selected vaccination area under the 2005 project was small and fox rabies had already spread outside this area. Presently, fox rabies is a major problem in Burdur and Isparta. Also here the number of rabies cases among cattle has increased dramatically. The main problem is that a delay in the distribution of vaccine baits in the infected area could result in the spread of the disease to other areas.

It is important to start the Project within the planned period.

Close cooperation must be maintained between MARA and relevant administrations before the Project.

It is important to guarantee the government contribution for the distribution of vaccines .

Meteorological observations should be taken into consideration during the planning phase. Statistical investigation should be done in advance.

4. Indicative Budget (amounts in EUR)

			SOURCES OF FUNDING										
			TOTAL EXP.RE	TOTAL PUBLIC EXP.RE	IPA CONTRIBUTION		NATIONAL PUBLIC CONTRIBUTION					PRIVATE CONTRIBUTION	
ACTIVITIES	IB (1)	INV (1)	EUR (a)=(b)+(e)	EUR (b)=(c)+(d)	EUR (c)	% (2)	Total EUR (d)=(x)+(y)+(z)	% (2)	Central EUR (x)	Regional/ Local EUR (y)	IFIs EUR (z)	EUR (e)	% (3)
Activity 1													
Supply contract (Vaccines)	–	X	2.200.000	2.200.000	1.870.000	85	330.000	15	330.000	0	0	0	–
TOTAL IB			-	-	-	-	-	-	-	0	0-	0-	
TOTAL INV			2.200.000	2.200.000	1.870.000	85	330.000	15	330.000	0	0	0	
TOTAL PROJECT			2.200.000	2.200.000	1.870.000	85	330.000	15	330.000	0	0	0	

NOTE: DO NOT MIX IB AND INV IN THE SAME ACTIVITY ROW. USE SEPARATE ROW

Amounts net of VAT

(1) In the Activity row use "X" to identify whether IB or INV

(2) Expressed in % of the **Public** Expenditure (column (b))

(3) Expressed in % of the **Total** Expenditure (column (a))

5. Indicative Implementation Schedule (periods broken down per quarter)

Contracts	Start of Tendering	Signature of contract	Project Completion
Supply Contract (vaccine)	2 nd quarter of 2011	3 rd quarter of 2011	2 nd quarter of 2014

6. Cross cutting issues

6.1 Equal Opportunity

The project will apply the policy of equal opportunities for all groups including vulnerable groups.

6.2 Environment

The project has no negative impact on the environment.

6.3 Minorities and Vulnerable Groups

According to the Turkish Constitutional System, the word minority encompasses only group of persons defined and recognized as such on the basis of multilateral or bilateral instruments to which Turkey is a party. This project has no negative impact on minorities and vulnerable groups.

ANNEXES

1- Log frame in Standard Format

2- Amounts contracted and Disbursed per Quarter over the full duration of Programme

ANNEX 1: Logical framework matrix in standard format

LOGFRAME PLANNING MATRIX	Programme name and number	Oral Vaccination Against Rabies in Turkey	
	Contracting period expires 2 years after the signature of the Financing Agreement	Disbursement period expires 1 year after the end date for the execution of contracts	
	Total budget: 2,200,000 EUR	IPA budget: 1,870,000 EUR	
Overall Objective	Objectively Verifiable Indicators	Sources of Verification	
<p>To decrease the incidence of urban and sylvatic rabies, with a view for the eradication of the disease in Turkey, and to ensure a human and animal health status, similar to that in the EU.</p> <p>As Turkey will gain experience regarding the eradication of rabies with the implementation of this project this will enable the implementation of control measures and administration of vaccines for proper control. The utilization of national resources to control 'Rabies' will be explored for</p>	<ul style="list-style-type: none"> - Decrease in rabies outbreaks between the years 2011-2014. - Decrease in the size of land where rabies outbreaks are reported between the years 2011-2014. - Increase in rate of negative results in suspect wildlife samples sent to the laboratory 	<ul style="list-style-type: none"> - Turkish Veterinary Information System (TURKVET) data - Records of Veterinary Control and Research Institutes (VCRIs) - Ministry of Agriculture and Rural Affairs (MARA) documentation - World Animal Health 	

future eradication of animal diseases.		Information Database (WAHID) data and World Organisation for Animal Health (OIE) reports - Regular Reports of the European Commission on Turkey's Progress Towards Accession from 2011 onwards	
Project Purpose	Objectively verifiable indicators	Sources of Verification	Assumptions
The control of rabies disease in wild sylvatic rabies in wild carnivore animals, and thereby the reduction of the risk of farm animals and humans becoming infected with rabies	- Decrease in the number of rabies cases in farm animals resulting from the transmission of the disease from wild animals between the years 2011-2014 - Decrease in the number of people infected with rabies between the years 2011-2014 - Implementation of the	- TURKVET data and records of the General Directorate of Protection and Control (GDPC) - Records of the Ministry of Health - Project monitoring reports	- Commitment to the accession of Turkey to the EU continues - Enforced control measures are properly implemented - Public awareness concerning rabies disease is increased - Veterinary, Phytosanitary, Food

	Implementing Regulation on Rabies Control		and Feed Framework Law in force.
Results	Objectively verifiable indicators	Sources of Verification	Assumptions
1. Immunity level against rabies infections of wild animals in defined areas is essentially improved. The number of diagnosed rabies cases is declined.	<ul style="list-style-type: none"> - Increase in rate of negative results in suspect wildlife samples sent to the laboratory between the years 2011-2014 - Statistically significant gradual increase in immunity levels determined by post-vaccination testing throughout the three-year implementation period of the project 	<ul style="list-style-type: none"> - Records of Veterinary Control and Research Institutes (VCRIs) - TURKVET data and records of the General Directorate of Protection and Control (GDPC) - Survey results - Project monitoring reports 	<ul style="list-style-type: none"> - Commitment to the accession of Turkey to the EU continues - Enforced control measures are properly implemented. - Public awareness concerning rabies disease is increased. - Veterinary, Phytosanitary, Food and Feed Framework Law in force.
Activities	Means	Costs	Assumptions
3.4.1. Supply of Vaccines to obtain Result No. 1 - vaccination campaign: - Procurement and provision of vaccine baits for oral vaccination of wild animals; the bait drop will be carried out in a territory of	1 supply contract. Oral vaccine baits must be delivered at least three months before the start of the vaccination campaign.	2,200,000 €	<ul style="list-style-type: none"> - Contract signed on time. - Oral vaccine baits delivered on time. - Oral vaccination

<p>84,000 km² once a year. Baiting density will be 18 baits per km² in the 1st, 2nd and 3rd years. Approximately 1,512,000 baits will be needed per year. (84,000 km² x 18 bait/km² x 3 years). During the implementation period 4,536.000 baits will be needed.</p> <p>Vaccine baits will be distributed in the Aegean region and local areas with a high number of rabies cases in wildlife. Vaccine baits will be delivered to the Bornova Veterinary Control and Research Institute (VCRI), which is equipped with storage units. which were built within the framework of the Project (No. 0503.06) Control of Rabies Disease in Turkey. These storage units have sufficient capacity to store all of the supplied baits. The capacity of the above mentioned storage unit is 50m3.</p> <p>- For the effectiveness of the vaccines it is important to realize the campaign during winter. The period of each campaign is two months. Implementation period will be planned according to weather conditions within these two months</p>			<p>campaigns implemented on time.</p> <ul style="list-style-type: none">- Adequate national budget allocated for the distribution of oral vaccine baits and conduct of post-vaccination testing- Cooperation of relevant administrations (ie. Ministry of Environment and Forestry) for the conduct of post-vaccination testing ensured. <table><tr><td>Precondition:</td><td>Close</td></tr><tr><td>corporation</td><td>between</td></tr><tr><td>MARA</td><td>and relevant</td></tr><tr><td>administration</td><td>for post</td></tr><tr><td>vaccination testing</td><td>is</td></tr><tr><td>critical for the project.</td><td>To</td></tr><tr><td>achieve this corporation a</td><td></td></tr><tr><td>‘Protocol’</td><td>or a</td></tr></table>	Precondition:	Close	corporation	between	MARA	and relevant	administration	for post	vaccination testing	is	critical for the project.	To	achieve this corporation a		‘Protocol’	or a
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			<p>Memorandum of Understanding should be signed with Ministry of Health and Ministry of Forestry and Environment to carry out post vaccination testing which is a precondition for the project</p> <p>As known due to the experience gained from previous Rabies Projects, cost of flights are financed by national funds within a framework of a national tender. In the year 2008, 304 flight hours, in the years 2009, 330 flight hours, in the year 2010 316 flight hours were realized. Total Flight costs of the three campaigns were 1,400,000 TL, which was</p>
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			funded from the national sources. Also, within the project renting of planes/helicopters will be again financed by Turkish national funds.
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ANNEX II: amounts (in €) Contracted and disbursed by quarter for the project (IPA contribution only)

Contracted	1st quarter of 2011	2nd quarter of 2011	3rd quarter of 2011	4th quarter of 2011	1st quarter of 2012	2nd quarter of 2012	3rd quarter of 2012	4th quarter of 2012	1st quarter of 2013	2nd quarter of 2013	3rd quarter of 2013	4th quarter of 2013
Supply Contract (vaccine)	-		1.870.000	-	-	-	-	-	-	-	-	-
Cumulated			1.870.000	1.870.000	1.870.000	1.870.000	1.870.000	1.870.000	1.870.000	1.870.000	1.870.000	1.870.000
Disbursed	1st quarter of 2011	2nd quarter of 2011	3rd quarter of 2011	4th quarter of 2011	1st quarter of 2012	2nd quarter of 2012	3rd quarter of 2012	4th quarter of 2012	1st quarter of 2013	2nd quarter of 2013	3rd quarter of 2013	4th quarter of 2013
Supply Contract (vaccine)	-		1.210.000	220.000	-	-	-	220.000	-	-	-	220.000
Cumulated			1.210.000	1.430.000	1.430.000	1.430.000	1.430.000	1.650.000	1.650.000	1.650.000	1.650.000	1.870.000

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