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### Management model to replace an original high cost drug with a non-original formulation. Evaluation, monitoring and results

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NATIONAL RESOURCES FUND

URUGUAY



## NATIONAL RESOURCES FUND

- \* National Agency for Highly Specialized Medical Procedures
- \* Created by law in 1980
- \* *Guarantees universal* access to highly specialized medicine (HSM).



### NATIONAL RESOURCES FUND

- \* Budget
  - \* U\$S 150,000,000 /year
    - (6% of health expenditure)
  - \* U\$S 24,000,000 / year on medicines in 2010
  - \* U\$S 30,000,000 expected for 2011

 It is anticipated that if the current trends continue from 2011 onwards, up to 10% of the country's drug spending will go to the NRF



# Management model to replace an original high cost drug with a non-original formulation.

# Evaluation, monitoring and results.



#### **Tacrolimus**

\* Tacrolimus is financed for immunosuppressive treatment in solid organ transplantation.

 The original trademark was exclusive until May 2009, when a non – original formulation was introduced.

•This change was resisted by patients and physicians and a process was designed to follow up the change.

•The new trademark was given to new patients and to those already in treatment who accepted the change.



 The drug's plasmatic measurements for patients who change to the new trademark started to be paided by the NRF

•Patients who decide to use the original drug continued paying a contribution for plasmatic measurements.

•Results are registered online on the NRF database.

•If patients are not within therapeutic levels, an email is automatically sent to the physicians who monitor the process. Then they contact the corresponding physician treating the patient.



#### **Research Background**

 At month four and at month ten after the start of the treatement with non-original Tacrolimus, all the available data on patients who changed was analyzed.

 In 93 patients analyzed there was a significant drop in Tacrolimus plasmatic levels (7.62/6.14 ng/ml, p<0.001) explained by a drop in given dose (5.59/4.81 mg, p<0.001).</li>

 Normally, the dose is gradually reduced within the months following the transplatation



#### **Current Evaluation**

• An evaluation was made on 408 patients using both trademarks.

• The differences between consecutive plasmatic measurements with the same trademarks (2,172 cases) were compared with correlative differences between doses.

\* An ANCOVA test was run.



#### FINDINGS

•Plasmatic values decreased with both trademarks (0.094 ng/ml the original and 0.099 ng/ml the generic)

•The decrease was associated with dose reduction (Beta 0.674, p<0.001)

• The trademarks were not associated with the difference in the plasmatic values (p=0.972).



#### **Current Situation**

•With the available information, we haven't found differences in terms of plasmatic values between both trademarks.

•More time is needed to evaluate the impact on grafts and patients survival.



# Thanks