RATIONEL PANIC – FROM A SCIENTIFIC POINT OF VIEW
S-EPO (erythropoeitin)
The production of Red Blood Cells
Blood Profiles

Normal

EPO positive
Blood Profiles

Normal

EPO positive
Erythropoietin
The EPO Test (Lasne F, de Ceaurriz J. Nature 2000)
EPO Profile

Individual Blood Profile

EPO Urine Profile
EPO Profile
Previous EPO technical document
Olympic Athlete (ref. Süddeutschen Zeitung)

- Blood Collection Period: 2000-2010
- No. of blood screenings >100
- No. of Urine EPO = unknown but many
- Abnormal blood profile
- No. of positive EPO tests = 0
Blood Profile Results (ref. Süddeutschen Zeitung)

FACTS
- Haemoglobin variation <5%
- Reticulocytes range 1%-3.5%
- Withdrawing of 1300 mL blood = reticulocytes >2.5%
- EPO injections >4000 IE three days a week = reticulocytes >2.5%
- Extensive but unknown no. of negative EPO tests in- and Out-Of-Competition

DOPING CONCLUSION
- EPO in large amount or a combination of EPO and blood transfusion with constant hemodilution (saline or albumin) for 10 consecutive years including the Olympic Games, World Championships and World Series without being caught...
Olympic Athlete (Medical Condition)

Benign Reticulocytosis
Clenbuterol

- Beta2agonist (asthma medication)
- Clenbuterol may increase fat free mass in some animals
- Clenbuterol is not approved for human or animal treatment
- Clenbuterol is, however, found in meat from livestock (11% in Mexico – an increase of 6%)
- There is no scientific evidence that Clenbuterol is anabolic in humans
- Clenbuterol is found in some nutritional supplements without being declared
- A number athletes have been tested positive for low concentrations of clenbuterol especially after competing in Mexico and China
- A number of tourists returning from Mexico and China have been found with Clenbuterol in their urine. Contents that were not present upon departure.
Clenbuterol

- One of the largest food poisoning cases involving clenbuterol happened in Shanghai in September 2006, when 336 people were hospitalized after eating pig meat or organs contaminated with the additive, China Daily

- Many more cases of recent clenbuterol poisoning is published
Clenbuterol (ref. Cyclingnews.com)
Two Cases of Clenbuterol (ref. Cyclingnews.com, Sport Federations, various News papers)

- Same International Federation
- Same competition
- Same hotel
- Same food
- Same time
Two Cases of Clenbuterol

Athlete 1 (5 months)
- Positive test 25 April 2010
- 8 October 2010 sanctioned 1 year

Athlete 2 (11 months)
- Positive test 25 April 2010
- Notified late September 2010
- 21 March acquitted from the use of Clenbuterol
- 8 June, decision appealed by WADA
The case with the table tennis player, Dimitrij Otcharov, who was tested positive with a similar content of Clenbuterol was acquitted and his case was NOT APPEALED.
Thank You