



Accredited anti-doping laboratories' needs for cooperation and support at EU level

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Doping control laboratories accredited by the World Anti Doping Agency (WADA)



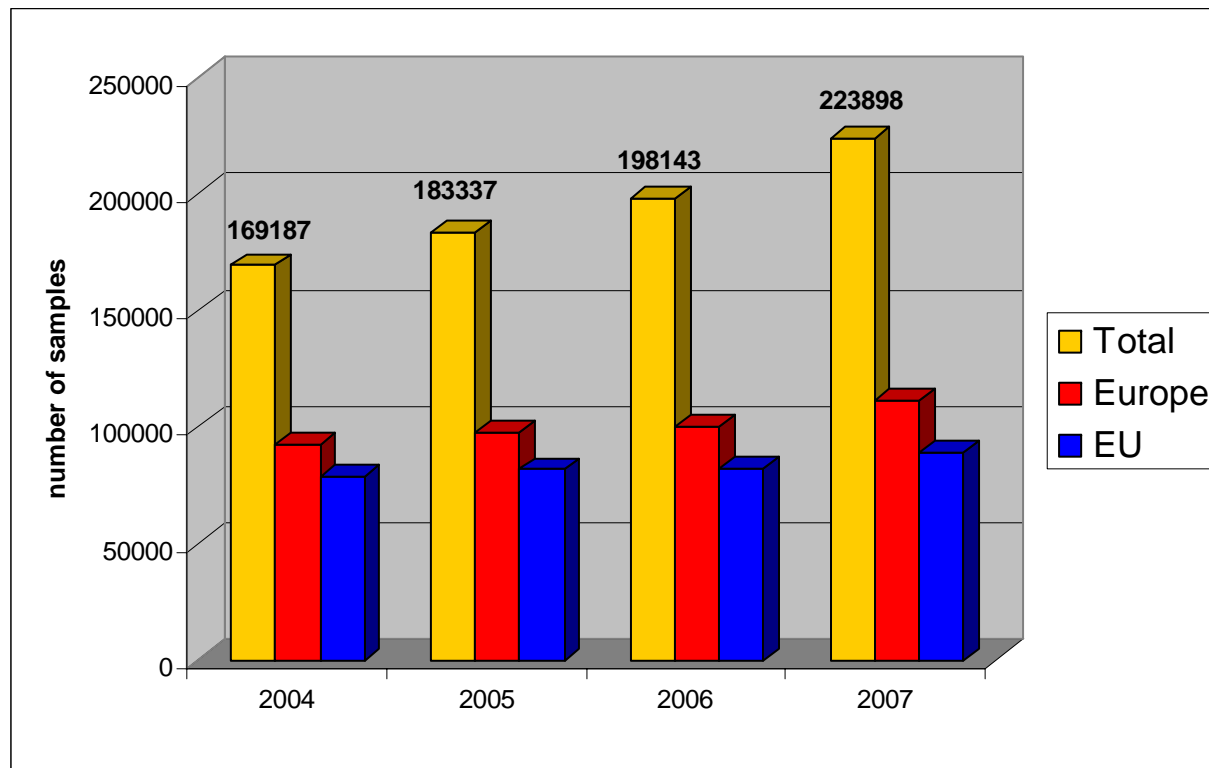


WADA accredited EU laboratories

Seibersdorf	Austria		London	Great Britain	
Ghent	Belgium		Athens	Greece	
Prague	Czech Republic		Rome	Italy	
Helsinki	Finland		Warsaw	Poland	
Paris	France		Lisbon	Portugal	
Cologne	Germany		Barcelona	Spain	
Dresden	Germany		Madrid	Spain	
			Stockholm	Sweden	



Doping control samples analysed by WADA accredited laboratories





Fields for improvement of cooperation and support at EU level

- Funding of Research
- Sharing of information between labs and NADOs/federations
- Sharing of capacities and technologies between labs
- Cooperation with pharmaceutical industry
- Permanent support for the implementation of new methods
- Dissemination of WADA information

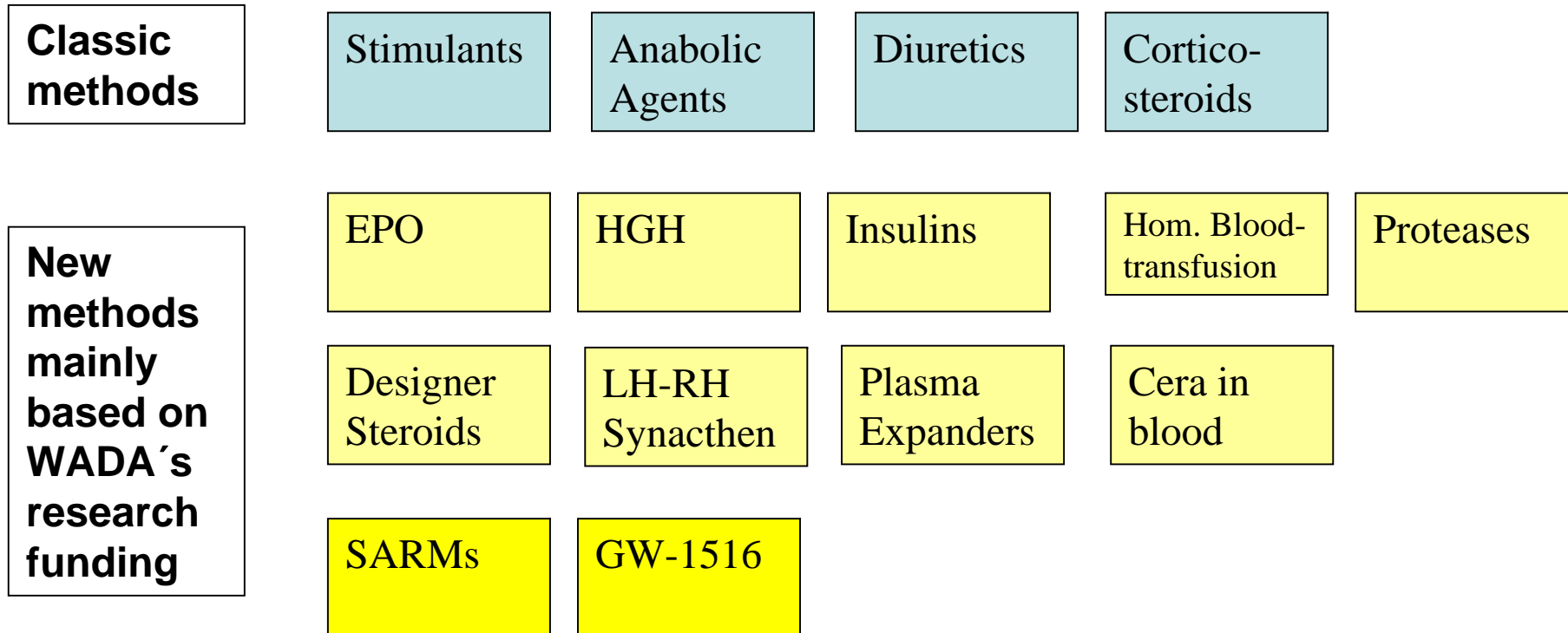


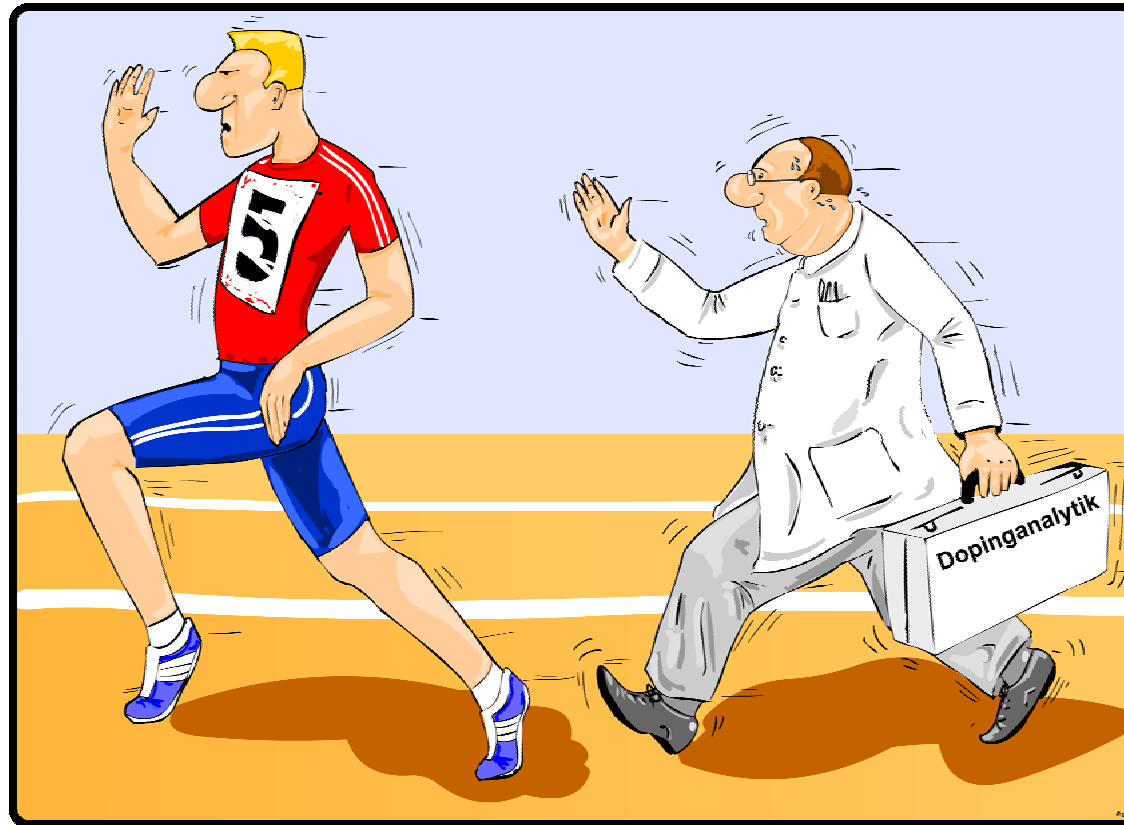
Funding of Research at EU level





Effects of research funding





New doping methods

Doping Labs



Funding of Research at EU level



Possible solution

Implementation of research funds for laboratories on an EU level

Focus on case related research

Unbureaucratic approval process



Sharing of information between labs and NADOs/federations





Example for the problem

Methods available for detection of

- Homologues blood transfusion (since 2004)
- Manipulation with proteases (since 2007)
- Insulins (since 2005)
- Screening for designer steroids (since 2005)

Nearly no request of NADOs and federations for these methods

Possible Reason: Lack of information about the availability of these methods or assumption that all new methods are automatically used in all labs.



Sharing of information
between labs and
NADOs/federations



Possible solution

Information of NADOs and federation about
available new methods by EU or WADA

Supervision, if new methods are used by
NADOs/federations

Access of labs to new methods by sub-
contracts.

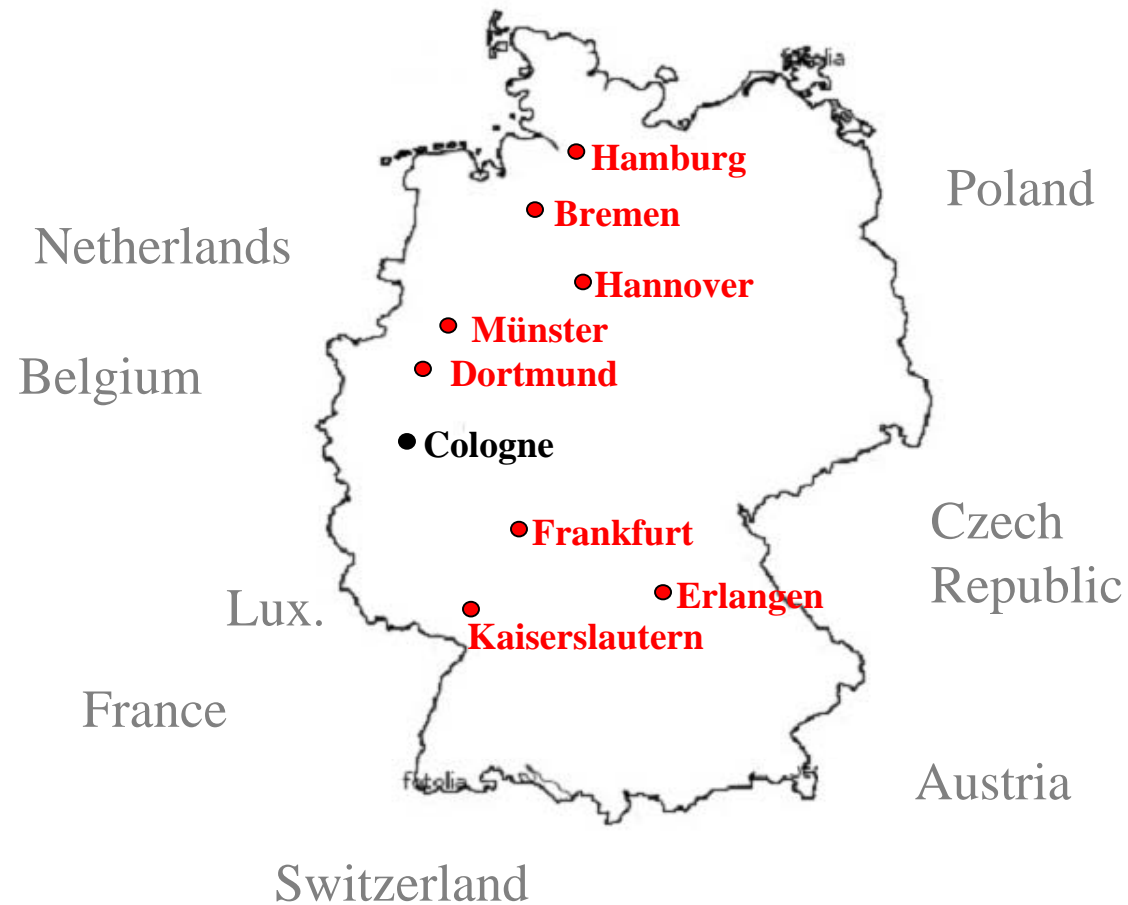


Cooperation with pharmaceutical industry





Clinical trials with Hematide® in Germany





Cooperation with pharmaceutical
industry



Possible solution

pharmaceutical companies which perform clinical trials with doping relevant substances in Europe should be committed to provide

- reference substances
- urine and blood samples

to doping control laboratories for the preventive development of methods.



Sharing of capacities and technologies between labs





Example for the problem

Technologies not available in all labs:

Isotope Ratio Mass Spectrometry, Orbitrap Mass Spectrometry, Flow Cytometry

- for implementation and maintenance specially educated staff necessary
- small labs have only a few samples per year (less than 100)
- quality cannot be maintained (minimum number of samples is necessary to keep the quality)
- not economic (costs per sample too high)



Sharing of capacities and
technologies



Possible solution

Sub-contracts between labs

Cooperation between labs in the education of
new technologies



Permanent support for the implementation of new methods





Example for the problem

Challenge for the laboratories

Analysis of increasing number of analytes in a shorter time period with a better quality

New technologies like LC/MS have to be implemented

New methods have to be validated on these technologies

Costs for technologies and staff

In case these new technologies are not implemented, quality differences between laboratories may occur.

Adverse analytical finding in one lab/ Negative result in the other lab.



Permanent support for the
implementation of new methods



Possible solution

Guarantee of governmental support for the
implementation of new technologies

For orientation: European consensus about
necessary equipment



Deutsche
Sporthochschule Köln
German Sport University Cologne

Institut für Biochemie
Institute of Biochemistry

Dissemination of WADA information





Example for the problem

For the Olympic Games, Australian Institute of Sports recommended glycerol for the prevention of dehydration under hot conditions

Team physician of a German National Team asked for the doping relevance of glycerol

Cologne laboratory asked WADA and received answer: doping relevance given because of plasma expanding effects

The Cologne laboratory informed immediately the Australian Institute of Sports.

Problem: In this case only Germany and Australia knew the doping relevance of glycerol. No general dissemination of this information to other groups.



Dissemination of
WADA information



Possible solution

Page on WADA website with questions
and answers related to the prohibited list



Summary

Needs for an improvement of the fight against doping from a EU laboratories perspective:

- Funding of research on a EU level
- Improvement of cooperation between labs NADOs, Federations and WADA
- Improvement of cooperation with pharmaceutical industry
- Guarantee of support to be able to maintain necessary technical standard