



**ERNDIM DIAGNOSTIC PROFICIENCY TESTING
EUGT Best Practice Meeting
Basel, December 2nd 2005**

DPT - Historic

- Exists since 1998
 - At the beginning : 4 urine samples per year
 - Since 2003, 6 urine samples per year
 - Modifications of the scheme are decided by the Executive Board and the Scientific Advisory Board of ERNDIM
 - Same “rules” for all centers
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DPT - Logistics

Four centers in 2005:

- Western Europe (Dr Bonham, Sheffield, UK) : 26 centers
 - Eastern Europe (Dr Kozich, Prague, Czech Republic) : 24 centers
 - Northern Europe (Pr Willems, Nijmegen, The Netherlands) : 23 centers
 - Southern Europe (Dr Vianey-Saban, Lyon, France) : 22 centers
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DPT - Aim of the scheme

- 6 urine samples are sent per year : approximately 15 ml per sample
 - 2 surveys
 - Short clinical summary concerning the patient
 - Labs decide which test should be performed according to the clinical presentation (not enough urine to perform all investigations)
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Preinvestigations

Performed on each urine

- Creatinine : important parameter, quantitative results have to be expressed in mmol/mol creatinine
- pH
- Protein
- Glucose
- Ketone bodies (ketostix)
- Blood
- Nitrites
- Other

Tests required

- Aminoacids
 - Organic acids
 - Oligosaccharides
 - Mucopolysaccharides
 - (Purines, pyrimidines)
 - Possibility of cluster labs. The lab who receives sample is responsible for the results. Results can be sent to the cluster lab if required.
 - Quantitative results are required, when possible
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Origin of urine samples

- « Native » urine samples, from non treated patients (if possible)
- Urine from patients not affected with an inborn error of metabolism can be sent
- Approximately 300 ml of urine are required
- Urine are heated at 56°C for 20 min to avoid bacterial proliferation, homogenised and fractioned in aliquots of approximately 15 ml
- Urine samples are provided by the scheme organizer and by participants : each participant is supposed to provide one urine sample per year

Shipment and results

- Mailing : samples sent at room temperature by rapid mail. One mailing for the 2 surveys
 - Results have to be sent 3 weeks after the receipt of samples
 - Report forms are sent by the scheme organizer together with the samples
 - Reports have to be sent by e-mail, fax or surface mail, before the deadline indicated by the scheme organizer
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Timetable of the schemes

- February : shipment of samples of both surveys and of the forms by rapid mail
 - Three weeks later : deadline for result submission (Survey 1)
 - April : report of Survey 1 by e-mail by the scheme organizer
 - May : analysis of samples of the second survey
 - Three weeks later : deadline for result submission (Survey 2)
 - July : report of Survey 2 by e-mail by the scheme organizer
 - September : annual meeting (during the SSIEM meeting)
 - Autumn : annual report with scoring is sent by e-mail
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Scoring of results

A	Analytical performance	Correct results of the appropriate tests	2
		Partially correct or non-standard methods	1
		Unsatisfactory or misleading	0
I	Interpretation of results	Good, diagnosis is established	2
		Helpful but incomplete	1
		Misleading / wrong diagnosis	0
R	Advice for further investigations	Complete	1
		Unsatisfactory or misleading	0

Scoring of results (Southern Europe)

- Exists since 2002 in Southern Europe, in all centers since 2004
 - Results from all participants are summarized on an Excel table
 - This table is sent anonymously to Pr Bachmann (Lausanne) for scoring
 - The final score is the mean of the scores determined by Pr Bachmann and myself
 - Scoring is included in the Annual Report
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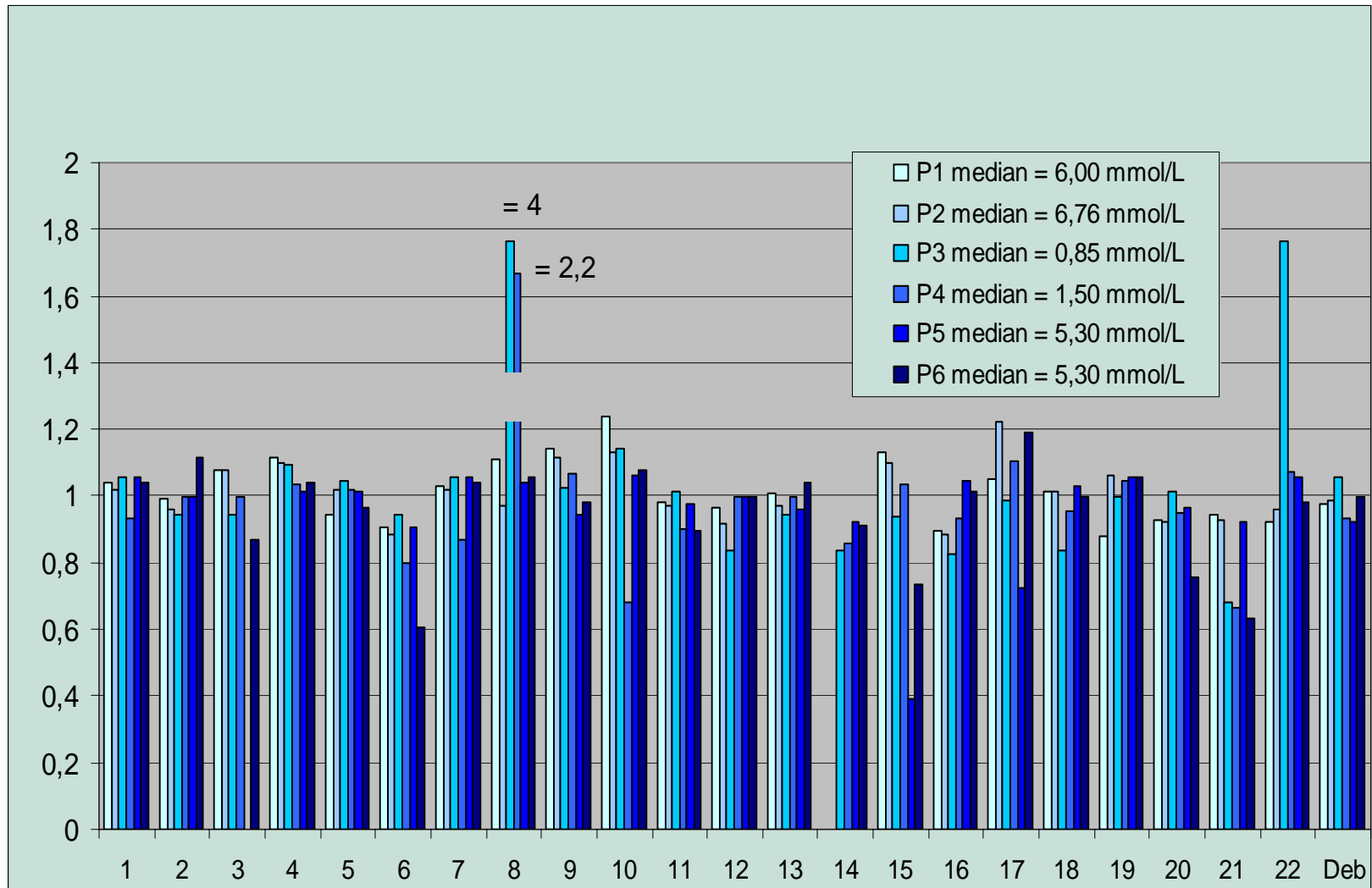
Certificate of participation

- Certificates of participation are sent to the labs who sent reports for at least one of the two surveys
 - Poor performers: warning letters are sent to labs who got less than 15 points (out of 30 points)
 - Good performers are those who got more than 22 points (out of 30)
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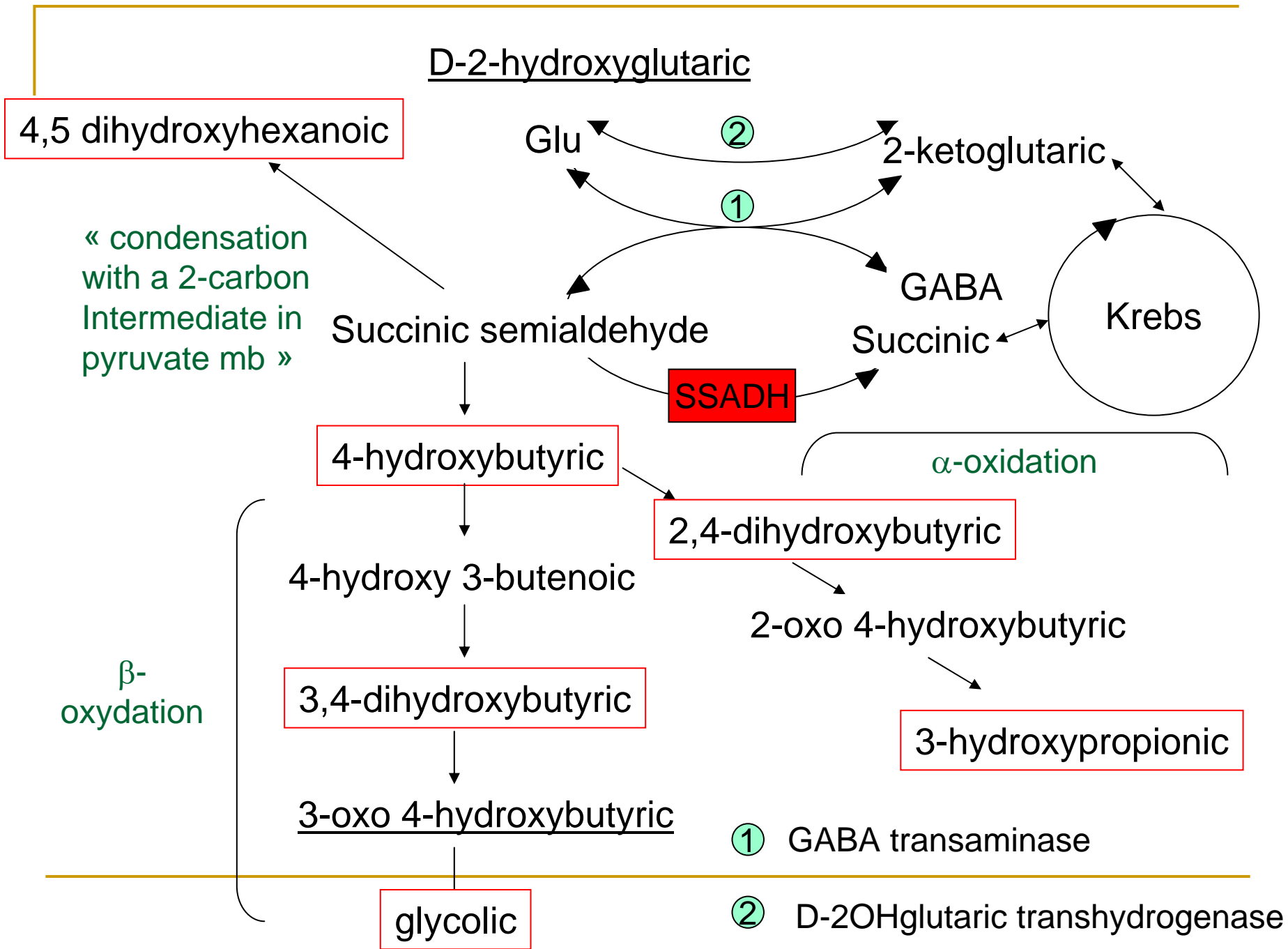
Annual meeting

- The scheme organizer :
 - presents the results, with graphical representation for quantitative results, ...
 - gives information concerning the disease: metabolic schemes, specificity of metabolites, ...
 - Gives the details how the scoring has been done for each sample
- Open discussion with the participants :
 - Explanation why they failed to reach the good diagnosis
 - Information concerning the patient when they provided the urine sample
 - Information concerning the disease, ...
- Educational objective

Creatinine : ratio to median



QuickTime™ et un
décompresseur TIFF (non compressé)
sont requis pour visionner cette image.

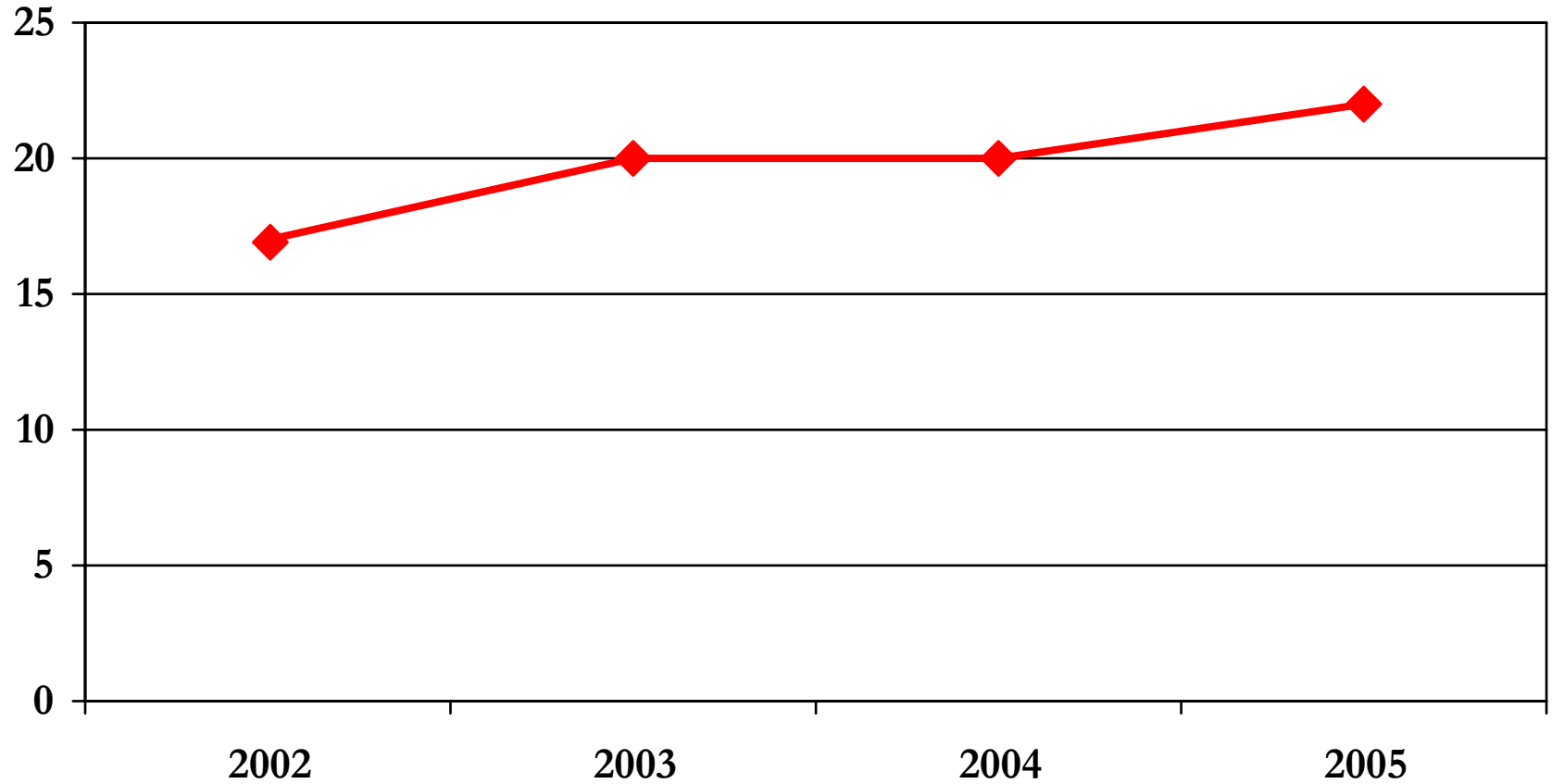


Annual meeting

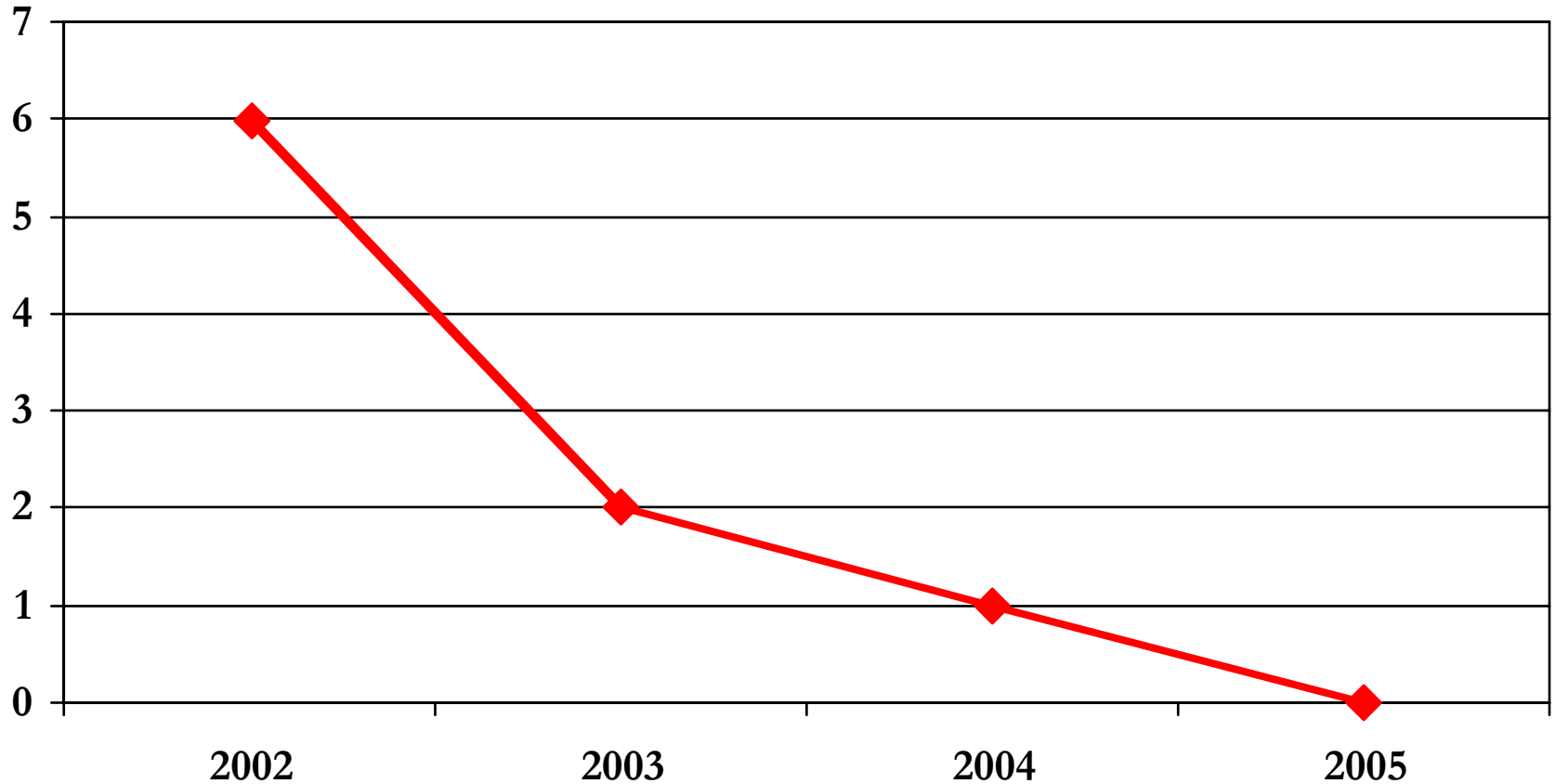
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Have we reached our
educational objectives ?

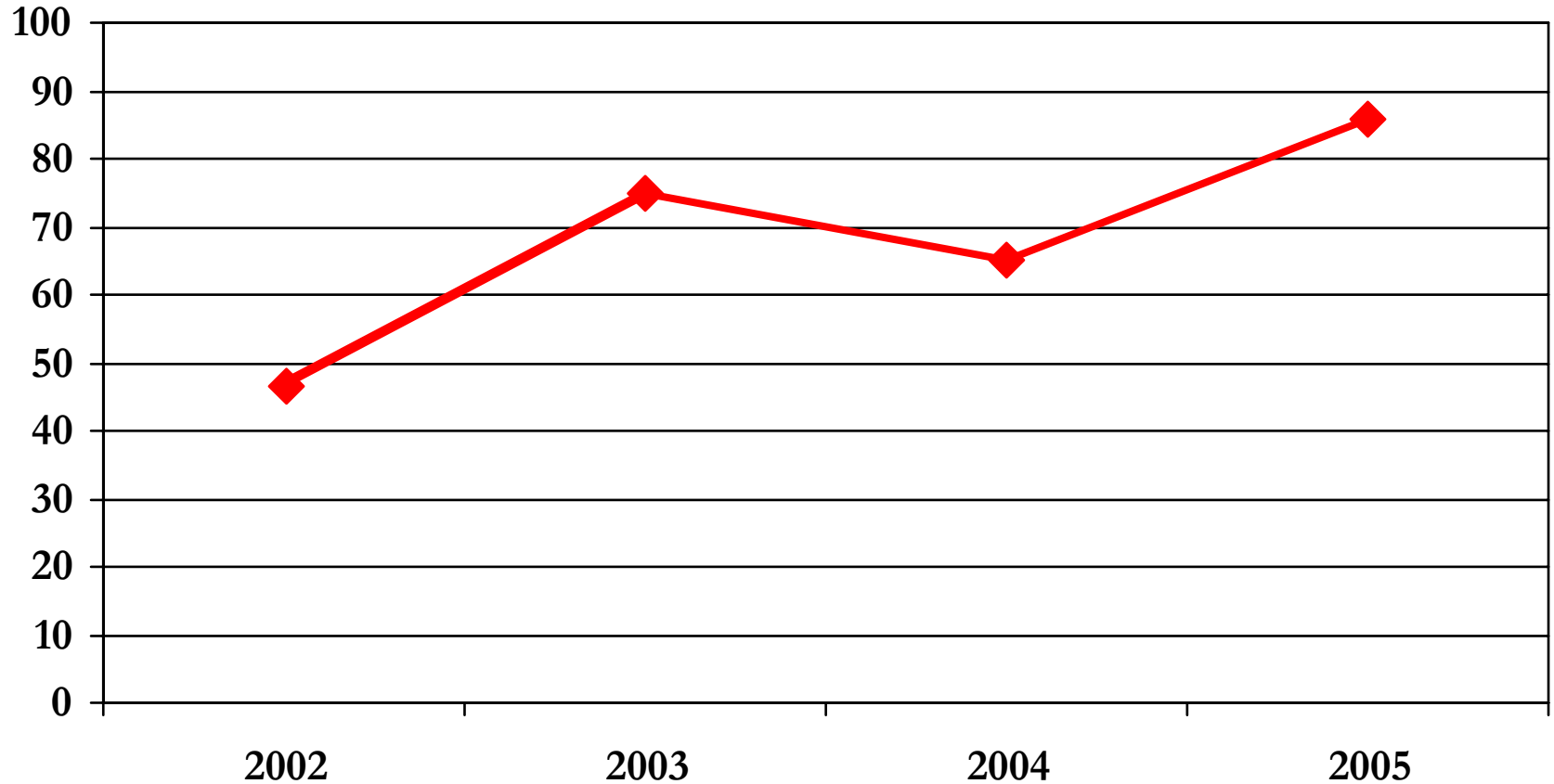
Number of labs



Number of poor performers ($< 50\%$ good results)



Percent of good performers ($> 75\%$ good results)



Percent of good results

