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ERNDIM QA Scheme for qualitative urinary organic acid analysis

Annual Report 2004

Participation

The geographical distributions of the active participants in 2004 are shown in Table 1. Sheffield and Heidelberg participate in each other's scheme and the two centres work closely together under the auspices of the ERNDIM Scientific Advisory Committee.

Country	Number of laboratories	Country	Number of laboratories
Austria	3	Philippines	1
Canada	4	Poland	1
Croatia	1	Saudi Arabia	1
Czech Republic	2	Slovakia	1
Denmark	1	Slovenia	1
Finland	1	Spain	1
Germany	10	Sweden	2
Italy	10	Switzerland	3
Netherlands	9	Turkey	1
Norway	1	United Kingdom	1
		USA	8

Table 1: Geographical distribution of participants

Samples and results

Three sets of three samples (total 9; sample number 124-132) were distributed to 62 laboratories. 44 laboratories returned results to the first and second circulation and 42 returned results to the third circulation. This time, all laboratories answered at least once.

Circulation	Number of returns
1. circulation	57 (92%)
2. circulation	55 (89%)
3. circulation	54 (87%)

Table 2: Receipt of results

Shipment of the samples

Last year we sent out the samples for all three circulations together. This is only for organisation reasons and keep the costs for participating in this scheme as low as possible. Some laboratories reported all three circulations together. **The idea of the scheme is to measure the samples evenly spread over the year and report the results near the closing date!**

Table 3: Distribution of scores for individual samples (laboratories making returns)

		-2	0	1	2
Sample 124	Normal pattern	4	0	0	53
Sample 125	Mevalonic aciduria	1	0	0	56
Sample 126	Normal pattern	3	1	6	47
Sample 127	Propionic acidemia	1	0	0	54
Sample 128	Methylmalonic aciduria	0	0	0	55
Sample 129	Normal pattern	1	0	0	54
Sample 130	Normal pattern	1	0	0	53
Sample 131	Isovaleric acidemia	0	0	1	53
Sample 132	Normal pattern	1	0	0	53

Scoring scheme

Individual returns for each sample were scored on the scale

2	Correct/satisfactory
1	helpful but incomplete
0	unhelpful
-2	misleading

Most active laboratories diagnosed correctly all five diagnosis. Mevalonic aciduria, propionic acidemia and isovaleric acidemia were correctly identified by 98%, the diagnosis of methylmalonic aciduria was found by all participants and 94% of the active participants correctly identified glutaric aciduria type I.

The four urines from the healthy controls showed a larger spectrum of possible interpretations. Samples 124, 129 and 130 were reported as (essential) normal from most participants (84%, 91% and 98%) but sample 126 was only reported from 49% as (essential) normal. The reason for this interpretation is certainly the high amount of lactate in the urine.

Comments on performance

The participants cumulative scores are shown in diagram 1 and in table 4. Cumulative scores are the scores for the whole year 2004. Thirty-seven participants (60%) got full marks!

The poor performance of some laboratories scoring less than 10 this year is due to missing returns. Seven laboratories only returned 2 distributions and three laboratories only returned 1 distribution for the whole year.

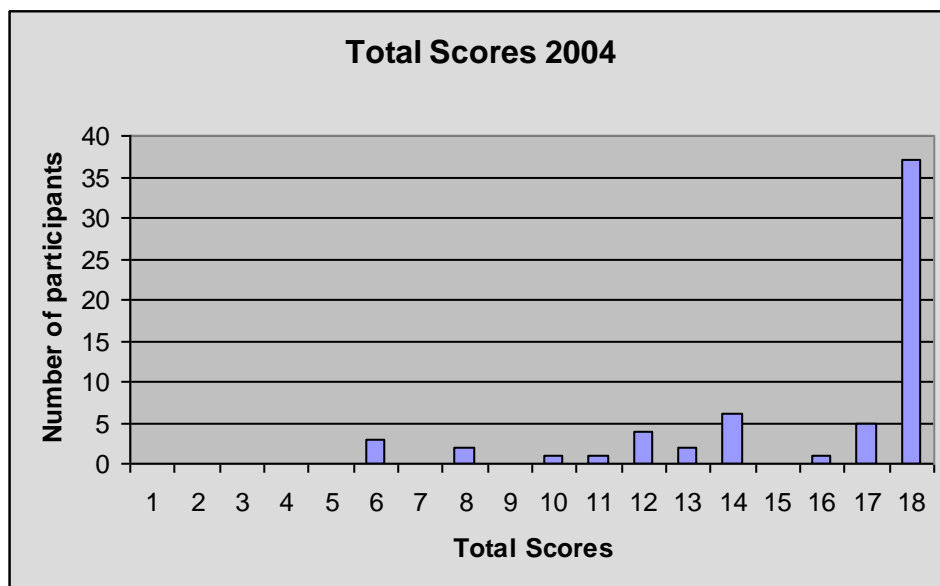


Diagram 1: Total scores 2004

Table 4: total scores 2004

Cumulative scores	Numbers of laboratories
18	37
17	5
16	1
15	/
14	6
13	2
12	4
11	1
10	1
9	/
8	2
7	/
6	3
5	/
4	/
3	/
2	/
1	/
0	/

Your total score 2004

Your total score for 2004 was: «Punkte»

General comments

Special thank for the laboratories that supported us last year with samples. This is critical for the success of the program and will keep the scheme interesting. **It is most appreciated that you will continue to support us with urine from patients. Please send us at least 200 ml urine of any interesting patients you may have. We will cover the costs.**

Yours sincerely,



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