

## Molecular Parasitology 2014.4

|               |                                                                                   |
|---------------|-----------------------------------------------------------------------------------|
| Survey        | Molecular Parasitology 2014.4                                                     |
| Start date    | November, 17 2014                                                                 |
| Supervisor    | dr. J.J. van Hellemond<br>Laboratorium Havenziekenhuis<br>Erasmus MC<br>Rotterdam |
| Subscriptions | 33                                                                                |
| Result sets   | 32                                                                                |

**Revised report** Eerder verzonden ronde rapport nogmaals met de Vakinhoudelijke Bespreking als bijlage"

| Scores      | Your score | MAP | reported |
|-------------|------------|-----|----------|
| Qualitative | 18         | 20  | 100%     |

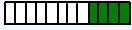
### Your remarks

sample B was positive positive also for Blastocystis spp (26.27 Ct)

### Comments

The theoretical questions are now available in QBase and answers can be submitted until Saturday December 27.

### Qualitative scores

| Analyte                   | This survey |           |       |                                                                                     | Cumulative |           |       |                                                                                       |
|---------------------------|-------------|-----------|-------|-------------------------------------------------------------------------------------|------------|-----------|-------|---------------------------------------------------------------------------------------|
|                           | correct     | incorrect | total | pictogram                                                                           | correct    | incorrect | total | pictogram                                                                             |
| Entamoeba histolytica PCR | 1           | 1         | 2     |  | 6          | 1         | 10    |  |
| Giardia lamblia PCR       | 2           | 0         | 2     |  | 8          | 0         | 12    |  |
| Cryptosporidium spp. PCR  | 2           | 0         | 2     |  | 4          | 0         | 12    |  |
| Dientamoeba fragilis PCR  | 2           | 0         | 2     |  | 8          | 0         | 12    |  |
| Entamoeba dispar PCR      | 2           | 0         | 2     |  | 8          | 0         | 12    |  |

## Molecular Parasitology 2014.4

|            |                                                                                                                                                                                                                                                                                                   |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sample :   | A Unfixed feces.                                                                                                                                                                                                                                                                                  |
| Patient :  | After a holiday tour through India a 28 year old Dutch woman presents at her local general practitioner with complaints of abdominal cramps and diarrhea. According to the woman the stool comprises sometimes red spots. The GP requests molecular diagnostics on parasitic intestinal protozoa. |
| Question : | Molecular research (PCR) on the intestinal protozoa <i>G. lamblia</i> , <i>Cryptosporidium</i> sp., <i>E. histolytica</i> , <i>E. dispar</i> and <i>D. fragilis</i> .                                                                                                                             |
| Remarks :  | Testen die niet door uw laboratorium worden uitgevoerd zet u uit op het instellingen scherm.                                                                                                                                                                                                      |

| Results                   | Expert values |                      | Your results |        | Score |
|---------------------------|---------------|----------------------|--------------|--------|-------|
|                           | qual.         | quant.               | qual.        | quant. |       |
| Entamoeba histolytica PCR | E Positive    | 33.3 <sup>M</sup> Ct | Negative     |        | 0     |
| Giardia lamblia PCR       | E Negative    |                      | Negative     |        | 2     |
| Cryptosporidium spp. PCR  | E Negative    |                      | Negative     |        | 2     |
| Dientamoeba fragilis PCR  | E Negative    |                      | Negative     |        | 2     |
| Entamoeba dispar PCR      | E Negative    |                      | Negative     |        | 2     |

E = Expert value ; M = Method group consensus value

Total 8

## Molecular Parasitology 2014.4

|            |                                                                                                                                                                         |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sample :   | B Unfixed feces.                                                                                                                                                        |
| Patient :  | For several months a 5 year old Dutch boy suffers from abdominal pain and alternating diarrhea. The GP requests molecular diagnostics on parasitic intestinal protozoa. |
| Question : | Molecular research (PCR) on the intestinal protozoa <i>G. lamblia</i> , <i>Cryptosporidium</i> sp., <i>E. histolytica</i> , <i>E. dispar</i> and <i>D. fragilis</i> .   |
| Remarks :  | Testen die niet door uw laboratorium worden uitgevoerd zet u uit op het instellingen scherm.                                                                            |

| Results                   | Expert values         |                      | Your results |         | Score                                                                               |
|---------------------------|-----------------------|----------------------|--------------|---------|-------------------------------------------------------------------------------------|
|                           | qual.                 | quant.               | qual.        | quant.  |                                                                                     |
| Entamoeba histolytica PCR | <sup>E</sup> Negative |                      | Negative     |         |  |
| Giardia lamblia PCR       | <sup>E</sup> Positive | 30.7 <sup>M</sup> Ct | Positive     | 28.9 Ct |  |
| Cryptosporidium spp. PCR  | <sup>E</sup> Negative |                      | Negative     |         |  |
| Dientamoeba fragilis PCR  | <sup>E</sup> Positive | 30.5 <sup>M</sup> Ct | Positive     | 28.4 Ct |  |
| Entamoeba dispar PCR      | <sup>E</sup> Negative |                      | Negative     |         |  |

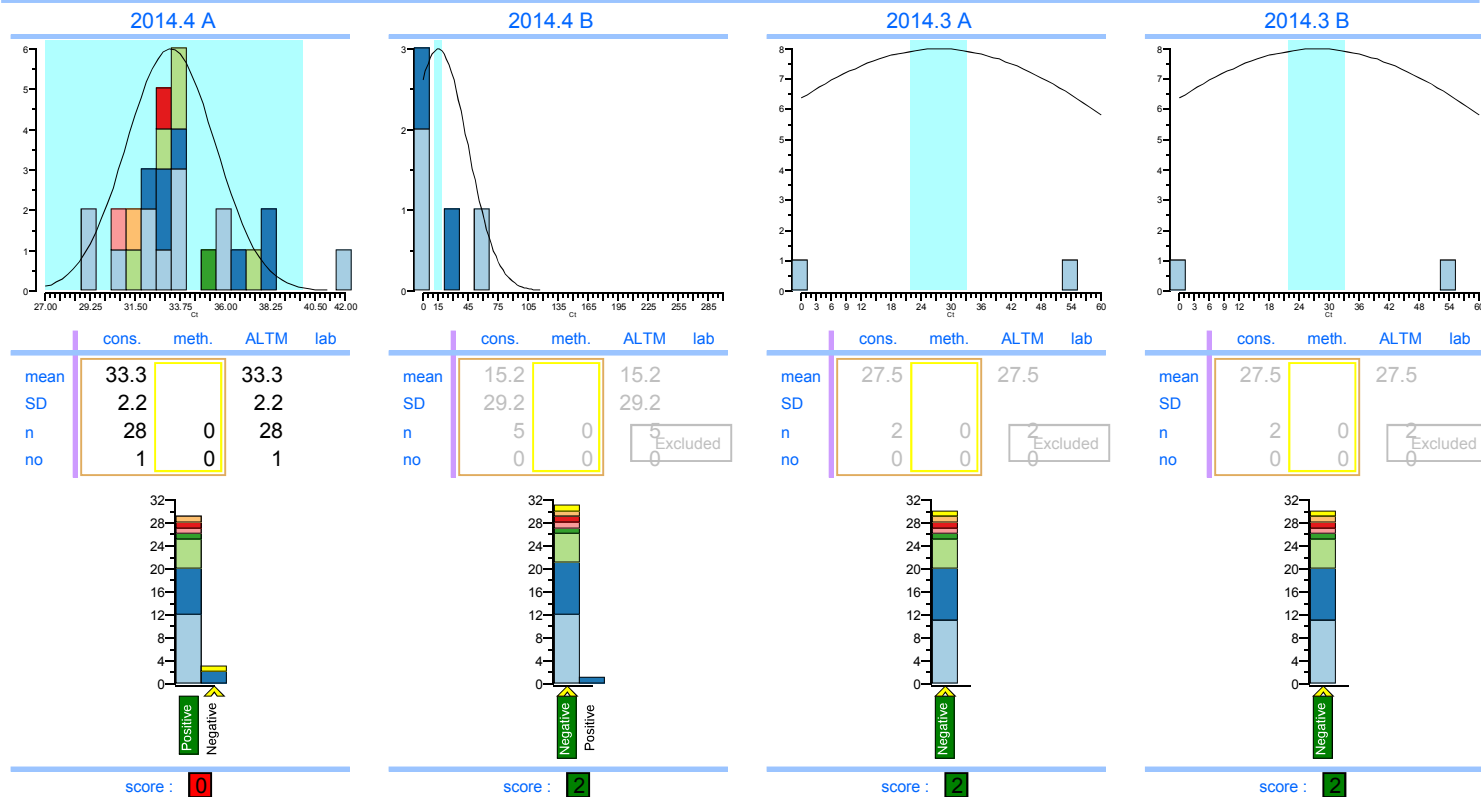
E = Expert value ; M = Method group consensus value

Total 10

# Molecular Parasitology 2014.4

## Entamoeba histolytica PCR

units: Ct



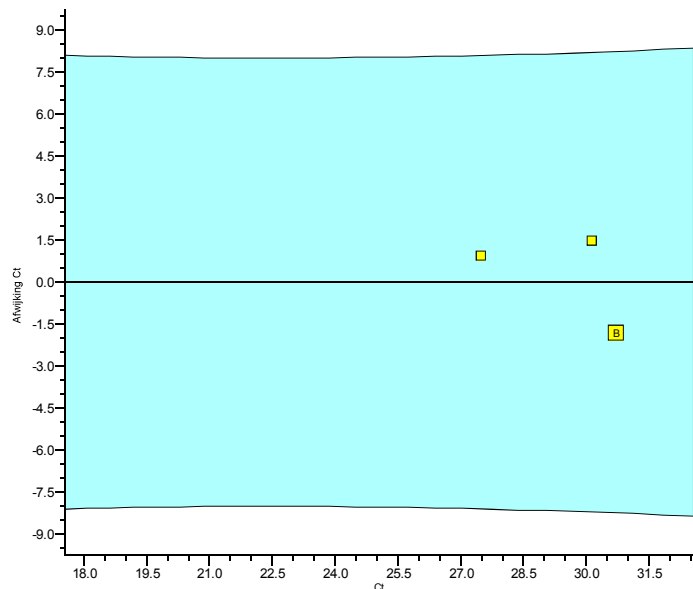
### Legend

|                             |                             |                               |                             |                   |
|-----------------------------|-----------------------------|-------------------------------|-----------------------------|-------------------|
| overig                      | SSU rRNA (Verweij 2004 JCM) | SSU rRNA in house             | Galactose specific adhesion | 18S rRNA in house |
| Light Mix Kit (TIB MOLBIOL) | SSU rRNA (Verweij/Bergmans) | SSU rRNA (Verweij 2003, TMIH) |                             |                   |

# Molecular Parasitology 2014.4

Giardia lamblia PCR

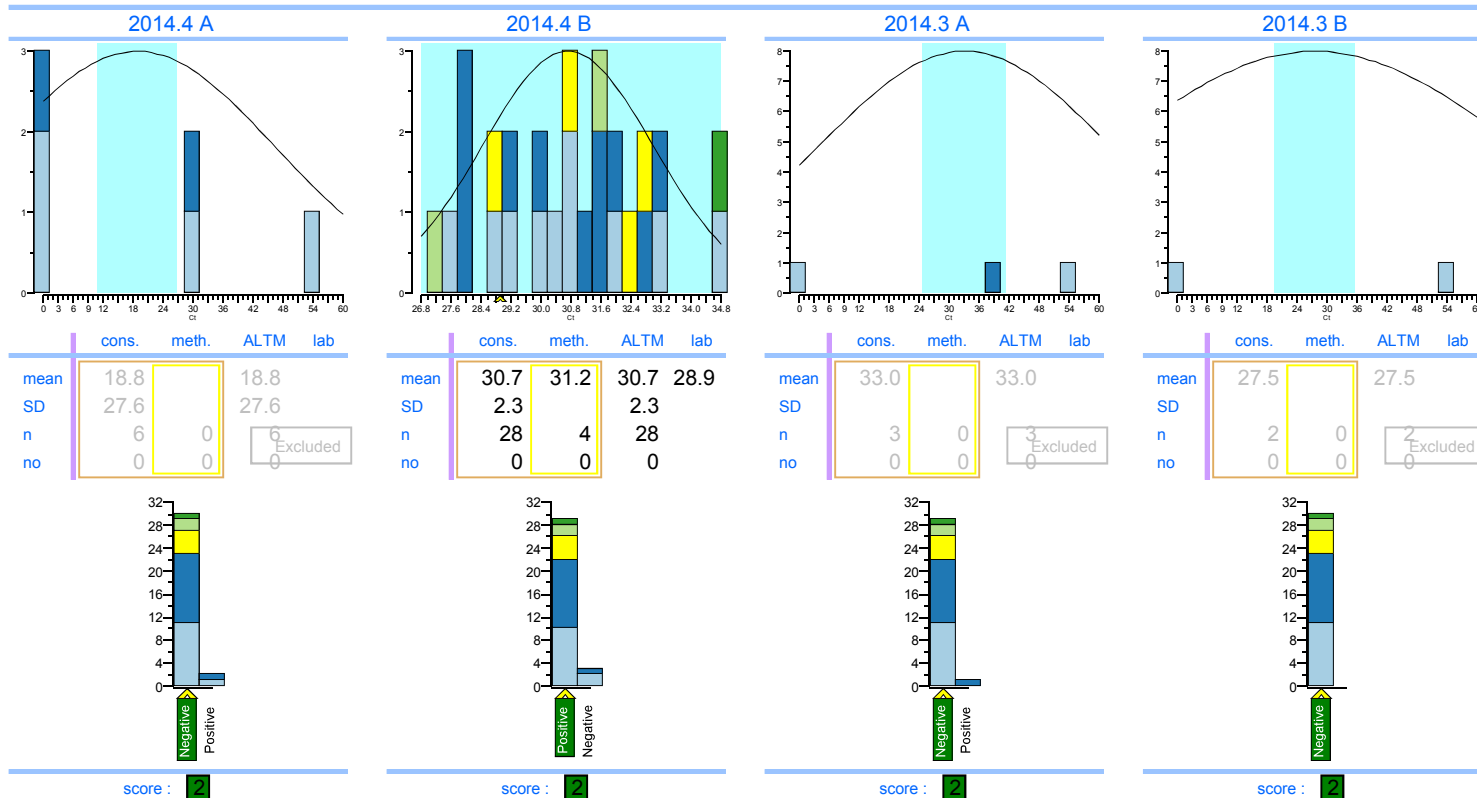
units: Ct



|           | 2014.4 | cumulative |
|-----------|--------|------------|
| Trueness  | -5.9%  | -1.0%      |
| Precision |        | 6.2%       |
| Number    | 1      | 3          |
| Outliers  | 0      | 0          |

Regression line

|                 |                   |
|-----------------|-------------------|
| Consensus group | Overall           |
| Method          | SSU rRNA in house |



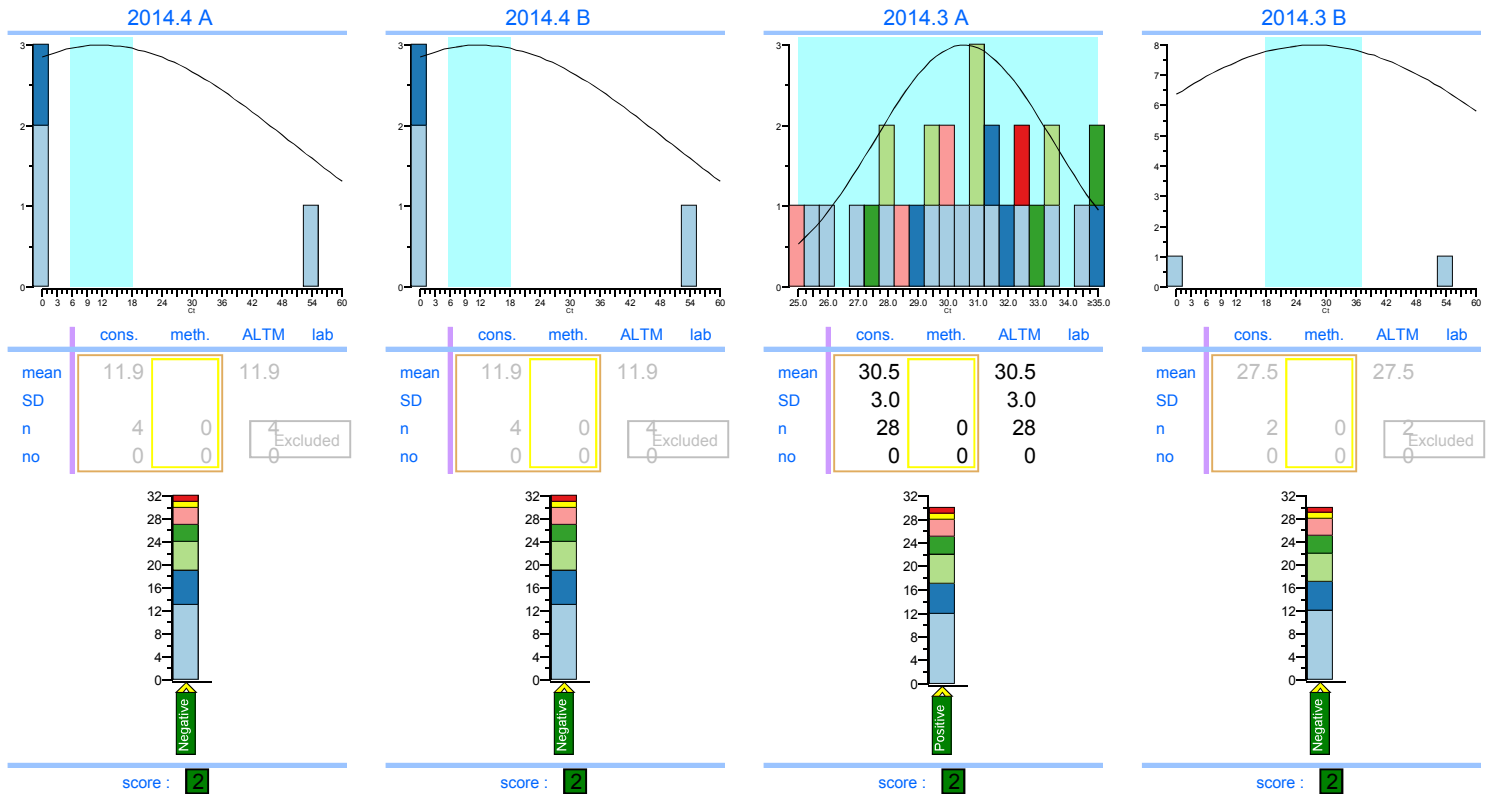
Legend

|        |                             |                   |                   |                             |
|--------|-----------------------------|-------------------|-------------------|-----------------------------|
| overig | SSU rRNA (Verweij 2004 JCM) | SSU rRNA in house | 18S rRNA in house | Light Mix Kit (TIB MOLBIOL) |
|--------|-----------------------------|-------------------|-------------------|-----------------------------|

# Molecular Parasitology 2014.4

## Cryptosporidium spp. PCR

units: Ct



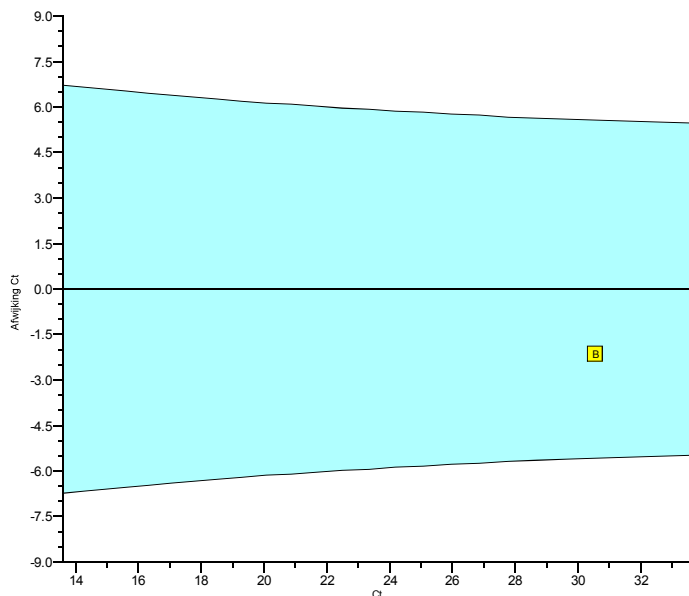
### Legend

|                              |                                      |                                |                                       |                   |
|------------------------------|--------------------------------------|--------------------------------|---------------------------------------|-------------------|
| overig                       | DNAJ-like protein (Verweij 2004 JCM) | Oocyst wall protein (Guy 2003) | DNAJ-like protein (Bruijnestein 2009) | SSU rRNA in house |
| 18S RNA (Jothikumar 2008 MM) | Light Mix Kit (TIB MOLBIOL)          |                                |                                       |                   |

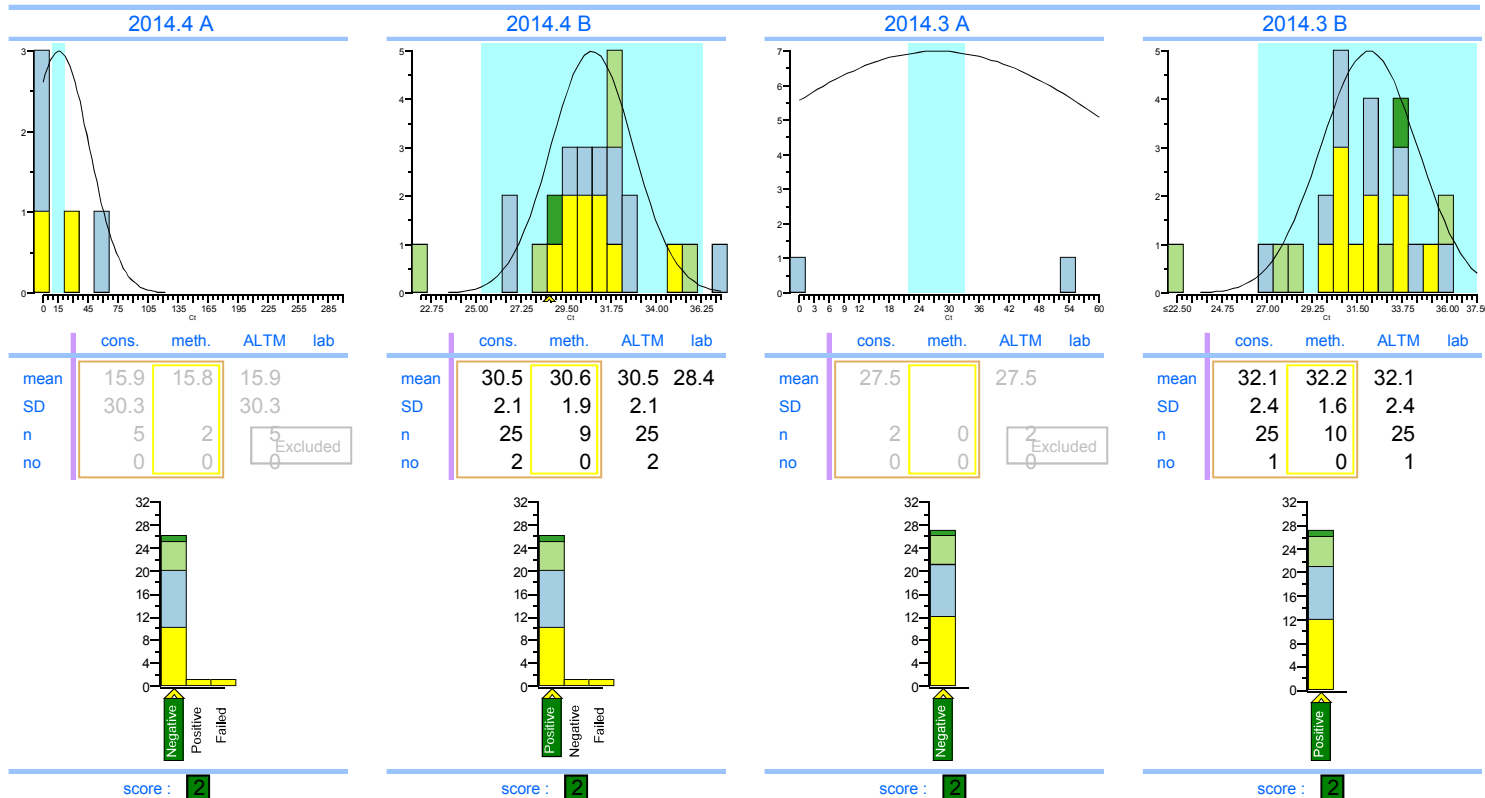
# Molecular Parasitology 2014.4

Dientamoeba fragilis PCR

units: Ct



|                 | 2014.4                           | cumulative |
|-----------------|----------------------------------|------------|
| Trueness        | -7.0%                            | -7.0%      |
| Precision       |                                  |            |
| Number          | 1                                | 1          |
| Outliers        | 0                                | 0          |
| Regression line |                                  |            |
| Consensus group | Overall                          |            |
| Method          | ITS van 5,8S rRNA (Verweij 2007) |            |



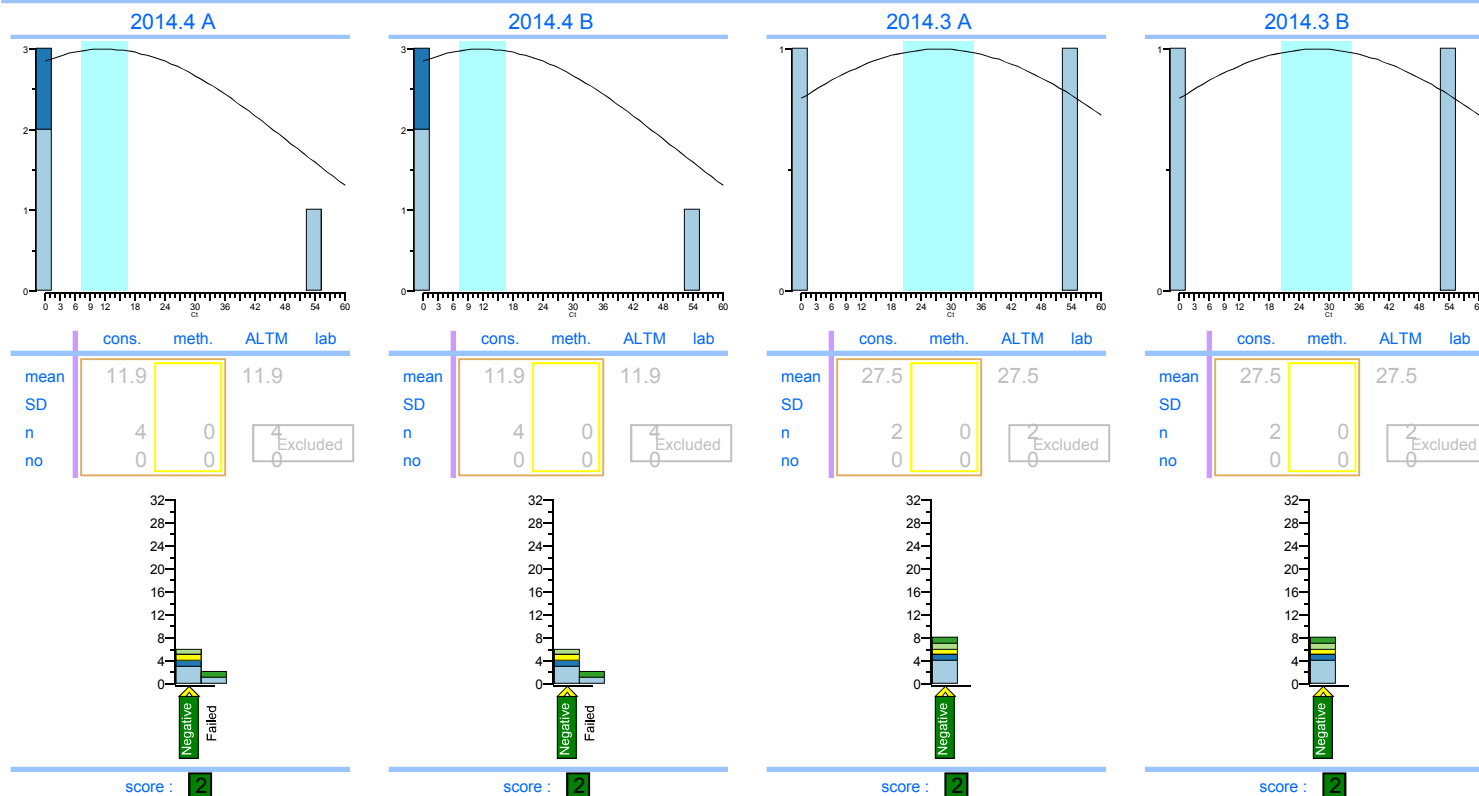
Legend

ITS van 5,8S rRNA (Verweij 2007) overig SSU rRNA in house Light Mix Kit (TIB MOLBIOL)

# Molecular Parasitology 2014.4

Entamoeba dispar PCR

units: Ct



Legend

|        |                             |                               |                   |                             |
|--------|-----------------------------|-------------------------------|-------------------|-----------------------------|
| overig | SSU rRNA (Verweij 2004 JCM) | SSU rRNA (Verweij 2003, TMIH) | SSU rRNA in house | Light Mix Kit (TIB MOLBIOL) |
|--------|-----------------------------|-------------------------------|-------------------|-----------------------------|