



A novel Real Time PCR to detect *Entamoeba histolytica* 18S rRNA gene

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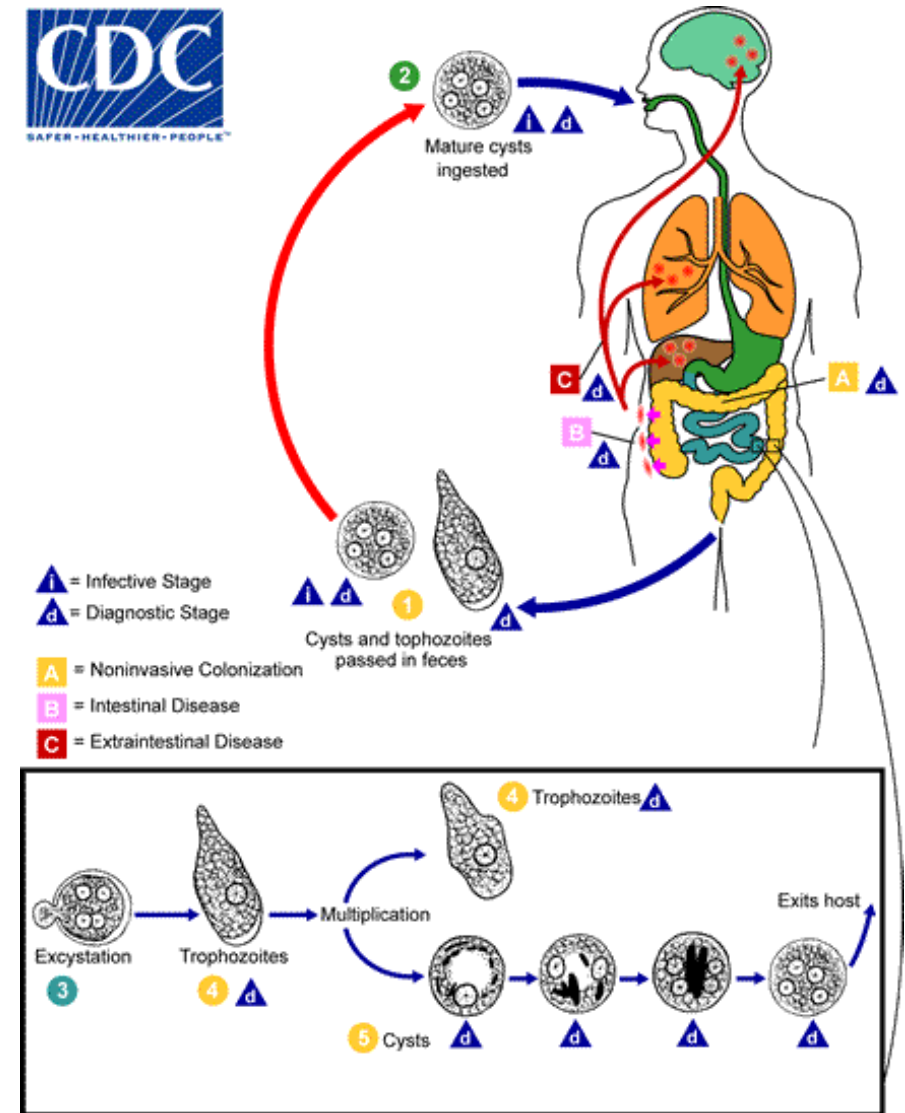


Introduction

Amoebiasis → The disease caused by *Entamoeba histolytica* in human

The diagnosis is based on laboratory

- Microscopy
- Copro-ELISA



Introduction



PCR is described as the most sensitive method for the discrimination of *Entamoeba* species

Introduction

- *E.histolytica* was investigated by a novel Real Time PCR specific for *E.histolytica* 18S rRNA gene region
- The stool samples of patients pre-diagnosed as amoebiasis in Department of Parasitology, Ege University Faculty of Medicine

Methods

- Archive materials of patients diagnosed as *Entamoeba* spp.

- DNA extraction from stool samples was performed with DNA Stool mini kit

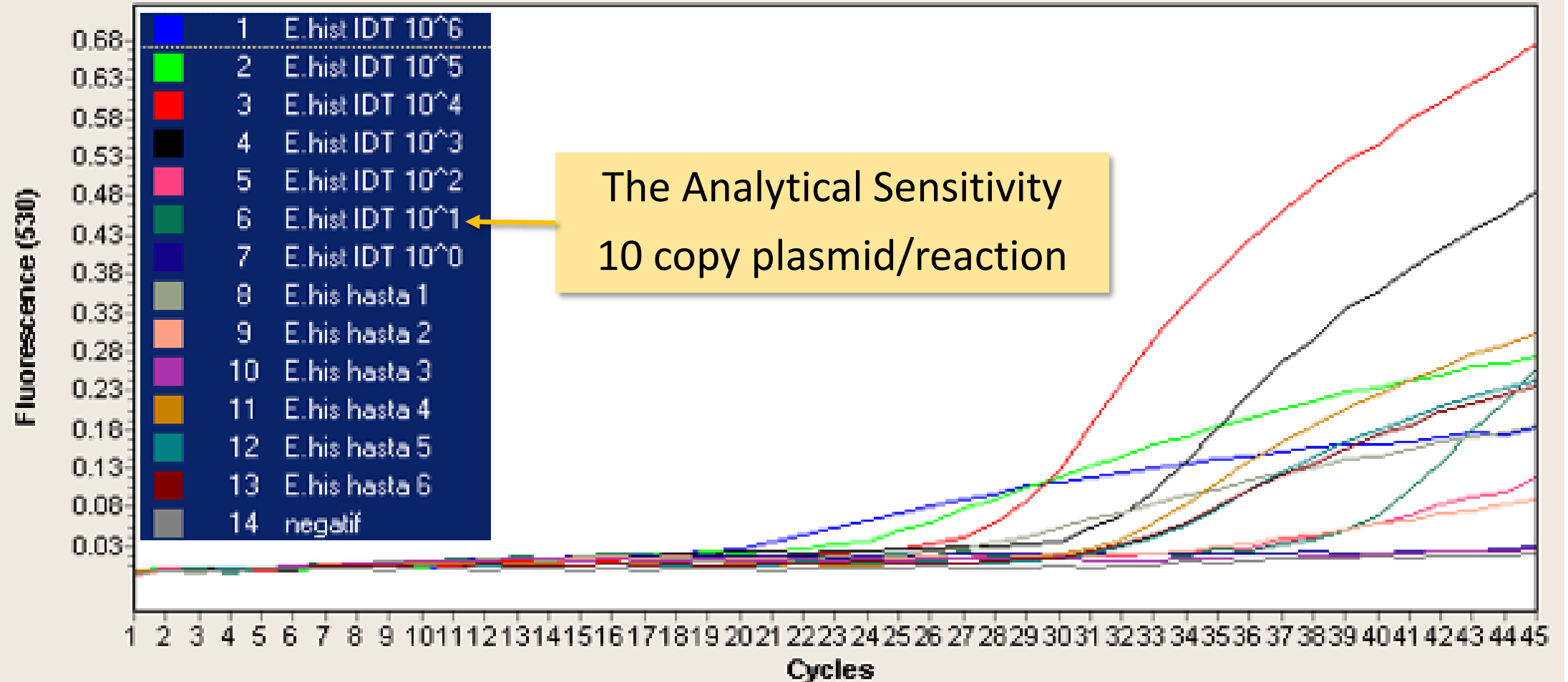
- The positive control plasmid targeting the 18S rRNA gene region
- The analytical sensitivity and specificity of the test was determined with the positive control plasmid

- Clinical sensitivity of the test was determined using the six clinical samples diagnosed as *E.histolytica* by microscopy or Copro-ELISA.

Results

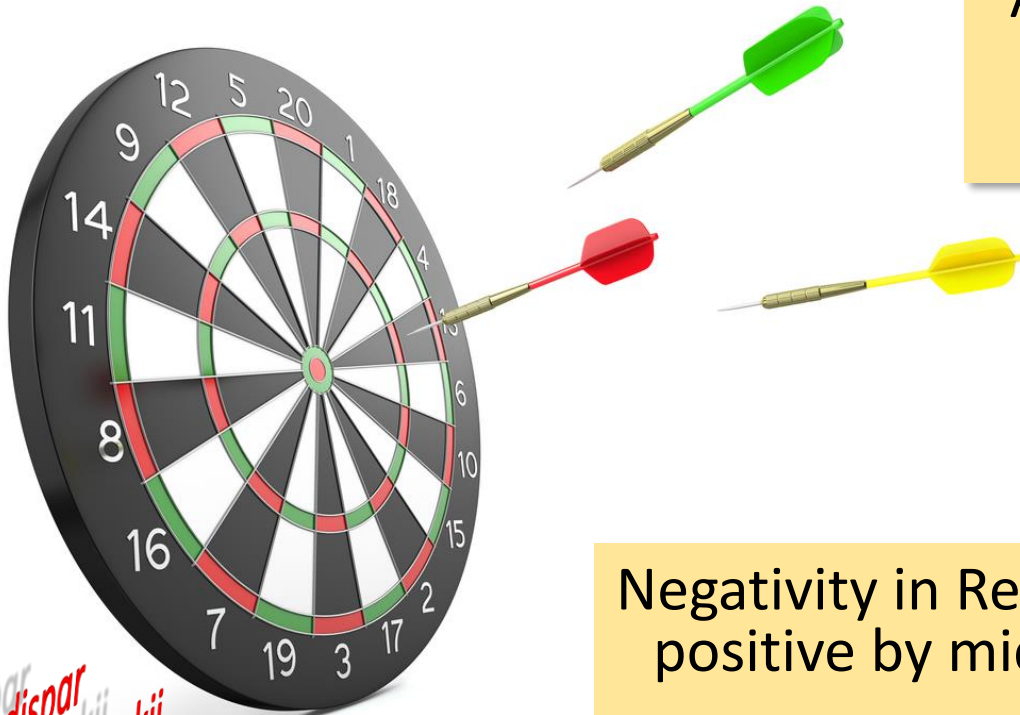
5/6 clinical samples were positive

Amplification Curves



Conclusion

A novel Real-Time PCR assay with high sensitivity for the detection of *E.histolytica* 18S rRNA gene



E. dispar
E. dispar
E. moshkovskii
E. moshkovskii

Negativity in Real-Time PCR in one patient which is positive by microscopic examination and Copro-ELISA

E. dispar or *E. moshkovskii*?

