

## 1                    **Microview: a medical application focusing on the diagnosis of diseases**

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3 Michopoulos Alexandros<sup>1</sup>, Ntakakis George<sup>2</sup>, Zamanis Stamoulis<sup>2</sup>, Petinaki Efthimia<sup>3</sup>

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5 <sup>1</sup> Aristotle University of Thessaloniki, School of Medicine, Thessaloniki, Greece

6 <sup>2</sup> Technological Educational Institute of Thessaly, Department of Computer  
7 Engineering, Larissa, Greece

8 <sup>3</sup> University of Thessaly, School of Medicine, Division of Microbiology, Larissa,  
9 Greece

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11 **Background.** Microview was made to make the connection between medicine and mobile  
12 technology reality, in order to achieve that we transform the widely used mobile devices  
13 (smartphones, tablets) into diagnostic tools. MicroView is a medical application that focuses  
14 on the diagnosis of diseases whose causes or results can be detected in biological fluids such as  
15 CSF, urine and blood.

16 **Methods.** The diagnosis is achieved by innovative image processing algorithms that detect the  
17 presence and the number of the white blood cells in the biological sample.

18 **Results.** The app has been tested in 37 urine and 23 CSF samples. The accuracy of the app was  
19 92%.

20 **Discussion.** In conclusion the app offers a quicker, easier and friendlier diagnosis to young  
21 scientists but also experienced professionals can be benefit from it, since all images are in  
22 electronic form and can provide a way of result confirmation.