Microview: a medical application focusing on the diagnosis of diseases

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

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

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

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