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New Studies On Clozapine Treatment in Psychosis

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Hemocue leuco+diff and DBS are two recent technological advances that can beneficially affect clozapine treatment in the near future.

1. Hemocue Leuco+diff is a new point of care instrument that provides both a total white blood cell count as that of the five most common types of leucocytes (neutrophils, lymphocytes, monocytes, eosinophils and basophils). In an open study in 70 patients on clozapine maintenance treatment, 39 clinical and 31 out-patients, the tolerability and the (dis-) advantages of the two methods of blood sampling, venous versus point-of care, were compared. In four consecutive monthly measurements, the method of blood sampling alternated monthly from point-of-care to venous and the other way around, from venous sampling to point-of-care. In those patients who indicated a preference, point of care method was preferred because it is less burdensome (no travelling involved, no waiting time) and immediate access to the results.

2. The dried blood spot (DBS) is a method of measurement of drug plasma levels in a drop of dried blood on standardized paper card. DBS has been validated for antibiotic therapy of fungal infections and the treatment of tuberculosis. In a study of 15 outpatients on clozapine maintenance therapy we studied the non-inferiority of clozapine monitoring with DBS compared with venous blood sampling. We will present the first results and the possible implications of the outcome for clinical practice.