**BACKGROUND**

Diffuse large B cell lymphoma (DLBCL), the most common non-Hodgkin lymphoma, is a heterogeneous disease with two separate diagnostic categories: ABC (activated B cell) – with inferior treatment outcome - and GC (germinal center). GEP (gene expression profiling) on frozen tissues is the gold standard for determination of these two subgroups. However this is not feasible in daily practice, and immunohistochemical (IHC) approaches on paraffin-embedded tissues are hampered by variable reproducibility and accuracy compared to GEP.

**ADVANTAGES**

- Robust RT-MLPA assay challenging current IHC and other array-based gene expression profiling assays for the stratification of DLBCL patients
- Rapid and cost-effective method suitable for routine diagnosis practice.
- No dedicated platform required.
- Results obtained in less than one day
- Up to 40 samples, including frozen or FFPE samples, tested in parallel

**DESCRIPTION**

The CALYM team has developed a robust reverse transcriptase-multiplex ligation-dependent probe amplification (RT-MLPA)-based assay allowing an accurate classification of GCB and ABC DLBCL. This easy-to-use method is suitable for a routine diagnosis workflow.

The simple and flexible RT-MLPA assay allows the rapid evaluation of the relative expression of 14 genes in a single reaction. From one up to 40 samples can be tested in parallel. It is efficient on frozen or formalin-fixed, paraffin embedded (FFPE) samples.

The whole procedure can be achieved in less than one day.

To facilitate the interpretation of the results, interfaced software was developed to handle the entire analysis process.

The method was validated on an independent cohort of frozen samples of 520 patients.

**PATENT INFORMATION**

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**KEYWORDS**

RT-MLPA, DLBCL, GCB and ABC subtypes, GEP

**PUBLICATION**