ECAT Information:
Lupus Anticoagulant: Extra sample information survey 2020-L1

In the Lupus Anticoagulant (LA) survey 2020-L1 we used a sample of an LA-positive patient with an LA-ratio of approximately 1.6 (sample code 20.62). This was confirmed in the survey by an average screen/confirm ratio of 1.6 for dRVVT methods. This corresponds with a weak Lupus Anticoagulant.

However, in the Staclot LA confirmation test the delta correction was 44 – 56 seconds. This is high for a weak positive LA sample.

At the time we used this plasma in our survey no detailed information was available about potential drug use by the patient. We asked the hospital from which the patient sample was obtained for further information about potential drug use.

The following information regarding this patient was received:

The donor is female. In the phase before the blood donation the patient was treated with vitamin K antagonist. The dose was reduced because of the start anti-platelet medication (acetylsalicylic acid and Ticagrelor) and immune modulation therapy [prednisone and hydroxychloroquine (long-term), methotrexate and mycophenolic acid (short-term)].

Because of the previous VKA treatment the INR was also still slightly elevated (approx. 1.5 – 1.6). According to hospital records the donor was not treated with any Anti-IIa or Anti-Xa agent (DOAC, Heparin).

It is well known that treatment with anticoagulants affects Lupus Anticoagulant testing [1-3]. But interference by hydroxychloroquine in the dRVVT test has also been reported [4].

Also in our survey we saw some difference in responsiveness between dRVVT reagents. This could be the effect of a drug as well. Because of the different drugs used by this patient it is impossible to indicate exactly which drug or combination of drugs could have affected LA testing.

We believe this information is potentially of interest to you in interpreting the survey results of survey 2020-L1. We advise you to take another look at this survey report.

References

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3. Favaloro, E.J., S. Mohammed, J. Curnow and L. Pasalic, Laboratory testing for lupus anticoagulant (LA) in patients taking direct oral anticoagulants (DOACs): potential for false positives and false negatives. Pathology, 2019; 51: 292-300.
4. Rand, J.H., X.X. Wu, A.S. Quinn, P.P. Chen, J.J. Hathcock and D.J. Taatjes, Hydroxychloroquine directly reduces the binding of antiphospholipid antibody-beta2-glycoprotein I complexes to phospholipid bilayers. Blood, 2008; 112: 1687-95.