

Division of Laboratory Medicine

Immunology

C1 esterase inhibitor functional test

General information

Specimen transport: All samples from outside the hospital should be transported on an ice pack. Transport at room temperature is acceptable within this hospital if the sample is delivered to the Immunology laboratory within 3 hours and before 3pm on weekdays only (not including bank holidays).

Repeat frequency: At significant change of clinical symptoms, monitoring of treatment.

Special precautions: The correct sample tube must be used (sodium citrate). It is important that the sample is transported to the immunology lab correctly.

Laboratory information

Normal reference range: 70 - 130% Normal

Volume and sample type: 4ml sodium citrate blood

Method: Colorimetric test

Participation in EQA scheme: UK NEQAS for C1 Inhibitor & Functional Complement and INSTAND Complement Analysis

Turnaround time (calendar days from sample receipt to authorised result): Median - 6

Clinical information

Indications for the test: Angioedema associated with low C4 when C1-esterase inhibitor is normal or high.

Factors affecting the test: Also seen in acquired C1-inhibitor deficiency in older patients where it is associated with myeloma/lymphoma.

(Last updated February 2024)