Who we are

Majority owned by the NHS, but with the commercial freedom to invest in innovation, Viapath are on a mission to transform pathology services in the UK. We provide pathology services to the NHS, private hospitals and other organisations both across the country and internationally.

What we do

All our laboratories are either accredited or working towards accreditation by UKAS to ISO15189. To view our laboratory accreditation status please follow this link:

http://www.viapath.co.uk/about-viapath/quality-and-governance/accreditations

TEST OVERVIEW

Description
A von Willebrand factor ristocetin co-factor (VWF:RCo) assay for VWF binding to platelet glycoprotein Ib is performed on test plasma, a normal plasma and a mixture of test and normal plasma. If the VWF activity is reduced beyond the theoretical value of the test & normal plasma mixture, this is indicative of the presence of an inhibitory antibody to VWF function. The testing is repeated after incubation of the test and normal plasmas and the mixture at 37°C for one hour as progressive VWF inhibitors have been described in rare instances.

Clinical details
von Willebrand factor (VWF) is a large adhesive glycoprotein synthesised in endothelial cells and megakaryocytes. Unlike the activated coagulation factors of secondary haemostasis it is not an enzyme and its functions involve binding to cells and molecules. Upon vessel injury, VWF binds directly to exposed sub-endothelial collagen and remains anchored. Blood flow unravels anchored VWF to expose the binding site for the constitutively expressed platelet surface receptor glycoprotein Ib. VWF captures and tethers platelets arriving at the scene which promotes subsequent events of primary haemostasis towards formation of a platelet plug. VWF also serves as the plasma carrier of FVIII to protect it from proteolytic degradation and also to ‘deliver’ it to sites of injury and clot formation. von Willebrand disease (VWD) is the most common hereditary bleeding disorder and the deficiency can be quantitative, involving reduced levels of normally functioning VWF, or qualitative, involving dysfunctional molecules. Laboratory investigation of VWD encompasses a battery of assays that assess different aspects of the molecule which inform sub-classification and clinical management: Unlike haemophilia A, inhibitor development in patients with VWD is a rare complication of treatment and mainly occurs in patients with severe inherited type 3 VWD. Acquired VWD in patients previously haemostatically normal can be due to autoantibodies, adsorption of VWF onto malignant cell clones, hypothyroidism or the high shear forces in aortic valve stenosis leading to loss of high molecular weight multimers via ADAMTS13.

Related condition or disease
von Willebrand disease

Reference range
Not detected

Department
Haemostasis and Thrombosis Department

Laboratory
Diagnostic Haemostasis and Thrombosis Laboratory at St Thomas’

Location
Viapath at St Thomas’ Hospital

ORDERING INFORMATION

www.viapath.co.uk
020 7188 7188 (54109)
BusinessDevelopment@viapath.co.uk
Sample type and Volume required
External requests: Citrated platelet poor plasma 1mL x 1 aliquot
Internal requests: please refer to EPR label

Turnaround time
Contact laboratory

Contacts
Diagnostic Haemostasis and Thrombosis Department
020 7188 2797
St Thomas' Hospital
North Wing - 4th and 5th Floors
Westminster Bridge Road
London SE1 7EH

Laboratory opening times
24/7

How can we help?

We have a number of partnering options to suit your needs, whether you require this specific test or a range of services, we are here to help. Contact one of our friendly Business Development Managers for more information, or visit our website.