



Chequers
Academy

Venepuncture

Equipment – Quick Reference

Monovette Information

There has been a move to standardise blood collection bottle colours between brands – please be mindful of possible manufacturer changes.

Description	CURRENT		NEW
	'EU code' Based on BS 4851	'US code' Based on ISO 6710	ISO 6710:2017
S-Monovette® Serum			
S-Monovette® Serum Gel			
S-Monovette® Citrate (1:10)			
S-Sedivette® ESR (1:5)			
S-Monovette® Lithium Heparin			
S-Monovette® Lithium Heparin Gel			
S-Monovette® EDTA KE			
S-Monovette® Glucose FE/FH (Fluoride/EDTA)			
S-Monovette® GlucoEXACT (Fluoride/Citrate)		-	
S-Monovette® metal analysis			

The correct order of draw for Monovette® blood collection bottles.

Colour :	Description :	Investigation
White	Serum	Alpha fetoprotein.
Brown	Serum Gel	Immunology, virology, microbiology antibody tests.
Orange	Lithium Heparin	Most routine biochemistry, microbiological assays, immunology, B12, ferritin, folate. NB: Manganese use old special metal-free tube.
Green	Sodium Citrate	All clotting and thrombotic screening.
Yellow	Sodium Fluoride	Glucose, lactate.
Blue	EDTA (Blood transfusion)	Transfusion only 4.5ml; hand written labels only.
Red	EDTA	1.2mls: All routine haematology, immunology, PTH, ACTH, FK506, cyclosporin for chemical pathology. 4.9mls: Virology molecular immunology, microbiology, PCR's, molecular genetics. 9.0mls: Molecular genetics.

Link to Guidance: [20_794_0000_201_Farbcodierung_in_der_BE_0618.pdf](#)

Features and Benefits



Simplicity

The BD Vacutainer® Eclipse™ Blood Collection Needle for venous blood sampling has a fully integrated safety shield, which once activated, protects against needle stick injuries. This safety shield is an integral part of the needle and its orientation aligns with the needle bevel, eliminating the need for re-alignment before venipuncture.









Pre-attached holder option

With this safety needle the holder is already pre-attached, so it is not necessary to manually assemble the needle and holder. This ready-for-use blood sample needle and holder is individually packaged in a sterile blister.






Link to Manufacturer guidance: [BD Vacutainer® Eclipse™ blood collection needle | BD United Kingdom](#)

Vacutainer Information

LABORATORY TUBE COLLECTION QUICK REFERENCE GUIDE

BD VACUTAINER® TUBE	ADDITIVE/ TUBE INVERSIONS	CLOTTING TIME REQUIRED	TESTS COMMONLY ASSOCIATED				
 Marble or Gold (SST)	<ul style="list-style-type: none"> Clot activator and gel for serum separation. 5 tube inversions required to ensure mixing of clot activator with blood. 	30 MINUTES	CHEMISTRY PROFILES	ELECTROLYTES	LIPID PANEL	HEPATIC PANEL	HEPATITIS PANEL
			THYROID STUDIES	IRON STUDIES	CANCER MARKERS	LITHIUM	ALCOHOL
			VITAMIN B12	VITAMIN D	HORMONE STUDIES	CARDIAC MARKERS	LIDOCAINE
			FOLATE	THERAPEUTIC DRUGS (Except Carbamazepine)	TRICYCLIC ANTIDEPRESSANTS	SALICYLATE	HOMOCYSTEINE (ON ICE)
 Red	<ul style="list-style-type: none"> Silicone coated (glass) No tube inversions required. No additive. 	60 MINUTES	RHEUMATOID FACTOR	RPR	URIC ACID	PTH	INSULIN
			PREALBUMIN	MAGNESIUM	BHCG	FT3/FT4	DIGOXIN
			AMYLASE	LIPASE	CORTISOL	CRP	C-PEPTIDE
 LIGHT GREEN	<ul style="list-style-type: none"> Lithium heparin and gel for plasma separation 8 tube inversions ensure mixing of anticoagulant with blood to prevent clotting. 	NO CLOTTING TIME REQUIRED	PREFERRED FOR ALL STAT GENERAL CHEMISTRY REQUESTS!!				
			CHEMISTRY PROFILES	IONIZED CALCIUM	LIPID PANELS	HEPATIC PANEL	CARDIAC MARKERS
 GREEN	<ul style="list-style-type: none"> Lithium heparin 8 tube inversions ensure mixing of anticoagulant with blood to prevent clotting. 	NO CLOTTING TIME REQUIRED	PREFERRED FOR ALL STAT GENERAL CHEMISTRY REQUESTS!!				
			TESTS LISTED ABOVE FOR THE LIGHT GREEN TUBE ARE ACCEPTABLE FOR THIS TUBE				LACTIC ACID – WHOLE BLOOD (NOT ON ICE)
 GRAY	<ul style="list-style-type: none"> Sodium Fluoride/Potassium Oxalate 8 tube inversions ensure proper mixing of additives with blood. 	NO CLOTTING TIME REQUIRED	LACTIC ACID (ON ICE)				
 PURPLE	<ul style="list-style-type: none"> Spray-coated K2EDTA (plastic) 8 tube inversions required to ensure mixing of anticoagulant with blood. 	NO CLOTTING TIME REQUIRED	CBC/PLT COUNT	H&H	SED RATE	BNP	HGBA1C
			CYCLOSPORIN	SICKLE CELL	RETIC	PATH REVIEW	INTRAOP PTH
			VANCOMYCIN	DIRECT COOMBS	RBC FOLATE	PROGRAF	CD3/CD4
			HIV				

LABORATORY TUBE COLLECTION QUICK REFERENCE GUIDE

 PINK	<ul style="list-style-type: none"> Spray-coated K2EDTA (plastic) 8 tube inversions prevent clotting. 	NO CLOTTING TIME REQUIRED	RED BLOOD BANK ARMBAND MUST BE COMPLETED AND ATTACHED TO THE PINK TOP!! GLASS RED TOP IS ALSO REQUIRED WHEN A TYPE & SCREEN/CROSSMATCH IS REQUESTED				
			TYPE & RH	TYPE & SCREEN	ANTIBODY SCREEN	CROSSMATCH	RHOGAM WORKUP
 BLUE	<ul style="list-style-type: none"> Buffered sodium citrate 0.105 M (≈3.2%) glass 0.109 M (3.2%) plastic 3-4 tube inversions ensure proper mixing of anticoagulant with blood. 	NO CLOTTING TIME REQUIRED	PT/INR	PTT	FIBRINOGEN	DDIMER	SPECIAL COAG & FACTOR ASSAYS CALL LAB PRIOR TO COLLECTION
			PFA- 2 GLASS 4.5ML TUBES DO NOT SEND VIA TUBE SYSTEM				
 CLEAR/BLUE							
 ROYAL BLUE	<ul style="list-style-type: none"> K2EDTA (plastic) 8 tube inversions ensure proper mixing of anticoagulant with blood. 	NO CLOTTING TIME REQUIRED	LEAD	MERCURY	ALUMINUM-PLASMA		
 ROYAL BLUE	<ul style="list-style-type: none"> Clot Activator (plastic serum) 8 tube inversions required to ensure mixing of clot activator with blood 	30 MINUTES	ZINC				

THIS CHART DOES NOT ENCOMPASS ALL LABORATORY TESTS.

SPECIMEN LABELING REQUIREMENTS:

PATIENT MUST BE IDENTIFIED UTILIZING TWO PATIENT IDENTIFIERS (I.E. FIRST AND LAST NAME & DATE OF BIRTH). ALL SPECIMENS MUST BE LABELED IN THE PRESENCE OF THE PATIENT. THE FOLLOWING COMPONENTS MUST BE COMPLETED, AS APPLICABLE:

NAME: DOE, JANE
 DATE OF BIRTH: 01/21/1949
 DATE OF COLLECTION: 09/28/2012 TIME: 14:52
 COLLECTED BY: PEGGY PHEBOTOMIST
 SOURCE (IF APPLICABLE): BLOOD, URINE, CSF, Etc.

Please contact Laboratory Client Services at 212-4400 for any questions.

ORDER OF DRAW:



Link to manufacturer guidance: [tube-collection-guide.pdf](#)

S-Monovette® Safety-Needle














Image	Order number	Ø/Length	Description	Color code	Packaging
	85.1160.200	0.9 mm/38 mm	20G x 1½"		500/case • 50/inner box individual sterile
	85.1162.200	0.8 mm/38 mm	21G x 1½"		500/case • 50/inner box individual sterile
	85.1162.600	0.8 mm/38 mm	21G x 1½" metal poor		500/case • 50/inner box individual sterile
	85.1440.200	0.7 mm/38 mm	22G x 1½"		500/case • 50/inner box individual sterile
	85.1372.200	0.9 mm/25 mm	20G x 1"		500/case • 50/inner box individual sterile
	85.1373.200	0.8 mm/25 mm	21G x 1"		500/case • 50/inner box individual sterile
	85.1441.200	0.7 mm/25 mm	22G x 1"		500/case • 50/inner box individual sterile

Image	Order number	Ø/Length	Description	Color code	Tubing length	Packaging
	85.1637.235	0.9 mm/ 19 mm	20G x ¾"		200 mm	480/case • 120/inner box individual sterile
	85.1638.235	0.8 mm/ 19 mm	21G x ¾"		200 mm	480/case • 120/inner box individual sterile
	85.1640.235	0.6 mm/ 19 mm	23G x ¾"		200 mm	480/case • 120/inner box individual sterile
	85.1642.235	0.5 mm/ 19 mm	25G x ¾"		200 mm	480/case • 120/inner box individual sterile
	85.1637.205	0.9 mm/ 19 mm	20G x ¾"		80 mm	480/case • 120/inner box individual sterile
	85.1638.205	0.8 mm/ 19 mm	21G x ¾"		80 mm	480/case • 120/inner box individual sterile
	85.1640.205	0.6 mm/ 19 mm	23G x ¾"		80 mm	480/case • 120/inner box individual sterile
	85.1642.205	0.5 mm/ 19 mm	25G x ¾"		80 mm	480/case • 120/inner box individual sterile
	85.1638.200	0.8 mm/ 19 mm	21G x ¾" detachable guide sleeve		200 mm	480/case • 120/inner box individual sterile
	85.1640.200	0.6 mm/ 19 mm	23G x ¾" detachable guide sleeve		200 mm	480/case • 120/inner box individual sterile

Link to manufacturer guidance: [20 903 0100 200 overview needles .indd](#)

Common Blood Tests

Full Blood Count (FBC)	Measures the haemoglobin levels and size of red cells. White cell levels are measured as markers for infection. It also measures platelets which are responsible for helping blood clot.
Clotting / Anticoagulation Tests (APTT/INR)	Measure different clotting systems of blood. They are often taken for those on warfarin or heparin (ensure you know the time of the last dose). They may also form part of the clinical picture for other conditions.
Red Cell Folate and Serum Vitamin B12 & Ferritin	Part of the clinical picture in cases of anaemia to determine which type of anaemia is present and how to treat it.
Thyroid Function Test (TFT)	Measures thyroid T4 (thyroxine) and TSH (thyroid stimulating hormone). To identify hypothyroidism and hyperthyroidism.
Urea and Electrolytes (U&E)	Kidney Function tests: checks level of sodium and potassium - the main electrolytes of the blood. Urea and creatinine measure the effectiveness of kidney filtration.
Liver Function Tests (LFTs)	Measure enzymes produced by the liver such as bilirubin, alkaline phosphatase, alanine aminotransferase (ALT) and gamma glutamyl transferase (GGT). As well as disease many medicines can interfere with liver function.
Bone	Measures mainly calcium, phosphate and alkaline phosphatase. Levels can be normal in bone diseases like osteomalacia as well as cancer affecting bones.
30. HbA1C	Used primarily in diabetes management; it shows cell glucose control over the previous 3 months.
34. Glucose level	Can be taken as a glucose tolerance test as two samples: one fasting and the other after a set period of time and glucose.

If the patient needs more information about the test and the reason it is being done in relation to their symptoms – ensure you refer back to the clinician.

If you are unsure about which collection tube to use or any special requirements for the blood test – please call and check with the lab. It is better to check than have to re-bleed the patient.

This handbook offers guidance for Phlebotomy trainees, primarily for use in the UK, though practices may vary regionally and internationally. While compiled from professional sources, Chequers Academy cannot guarantee its accuracy or foresee all potential applications. The training does not prescribe exclusive procedures or definitive patient care standards, as individual circumstances, clinical judgment, and patient preferences may require variations. Chequers Academy disclaims liability for any actions or omissions based on this training, and, to the extent permitted by law, is not responsible for any resulting loss or damage. Additionally, the Academy does not provide personal health insurance for students/trainees, who are encouraged to secure their own coverage.