



BD Integrated Diagnostic Solutions Specimen Management

Product catalogue



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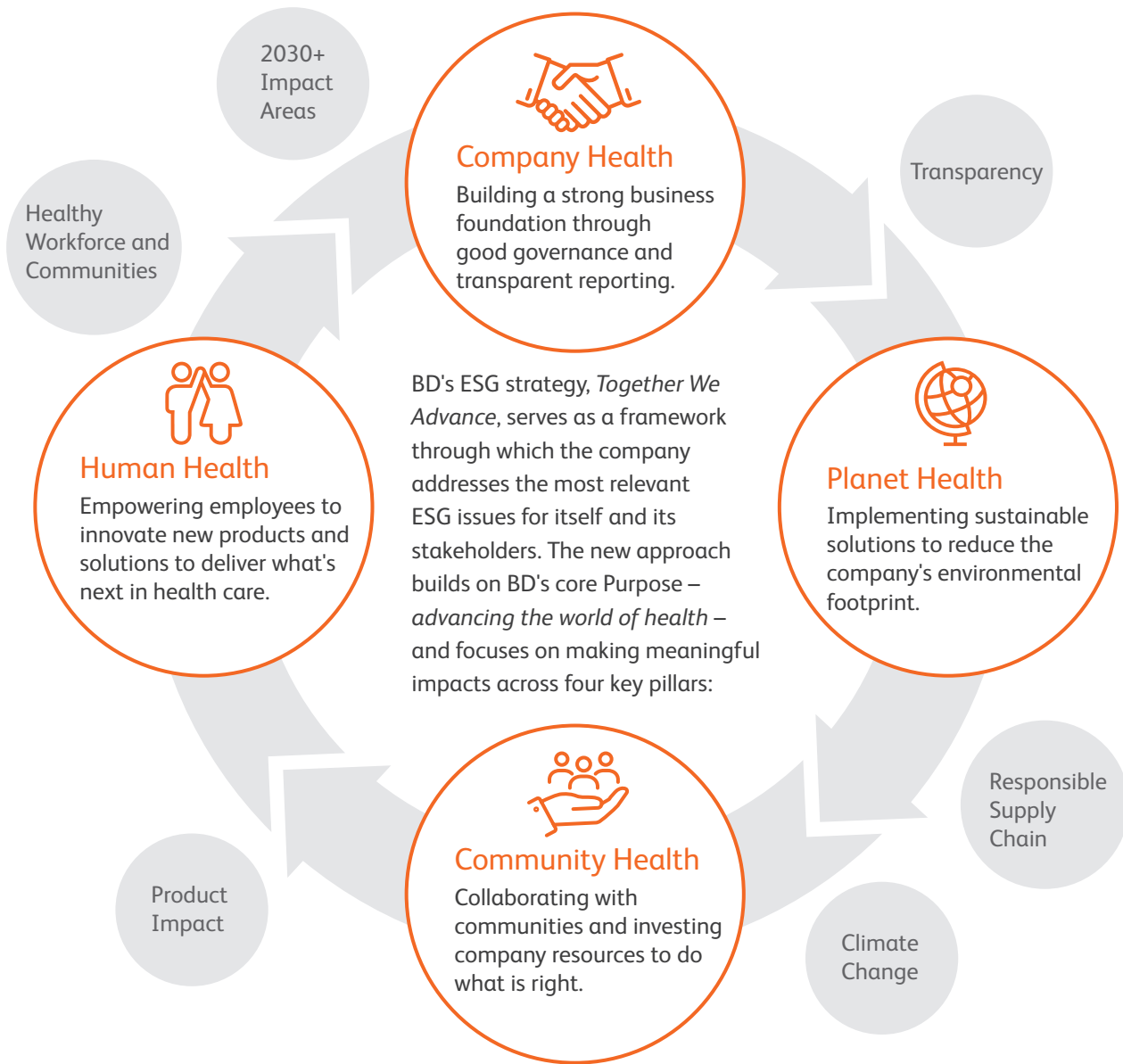
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About BD

BD is one of the largest global medical technology companies in the world and is advancing the world of health by improving medical discovery, diagnostics and the delivery of care. The company supports the heroes on the frontlines of healthcare by developing innovative technology, services and solutions that help advance both clinical therapy for patients and clinical process for healthcare providers. BD and its 70,000 employees have a passion and commitment to help enhance the safety and efficiency of clinicians' care delivery process, enable laboratory scientists to accurately detect disease and advance researchers' capabilities to develop the next generation of diagnostics and therapeutics. BD has a presence in virtually every country and partners with organisations around the world to address some of the most challenging global health issues. By working in close collaboration with customers, BD can help enhance outcomes, lower costs, increase efficiencies, improve safety and expand access to healthcare. For more information on BD, please visit bd.com.



BD's environmental, social and governance (ESG) priorities

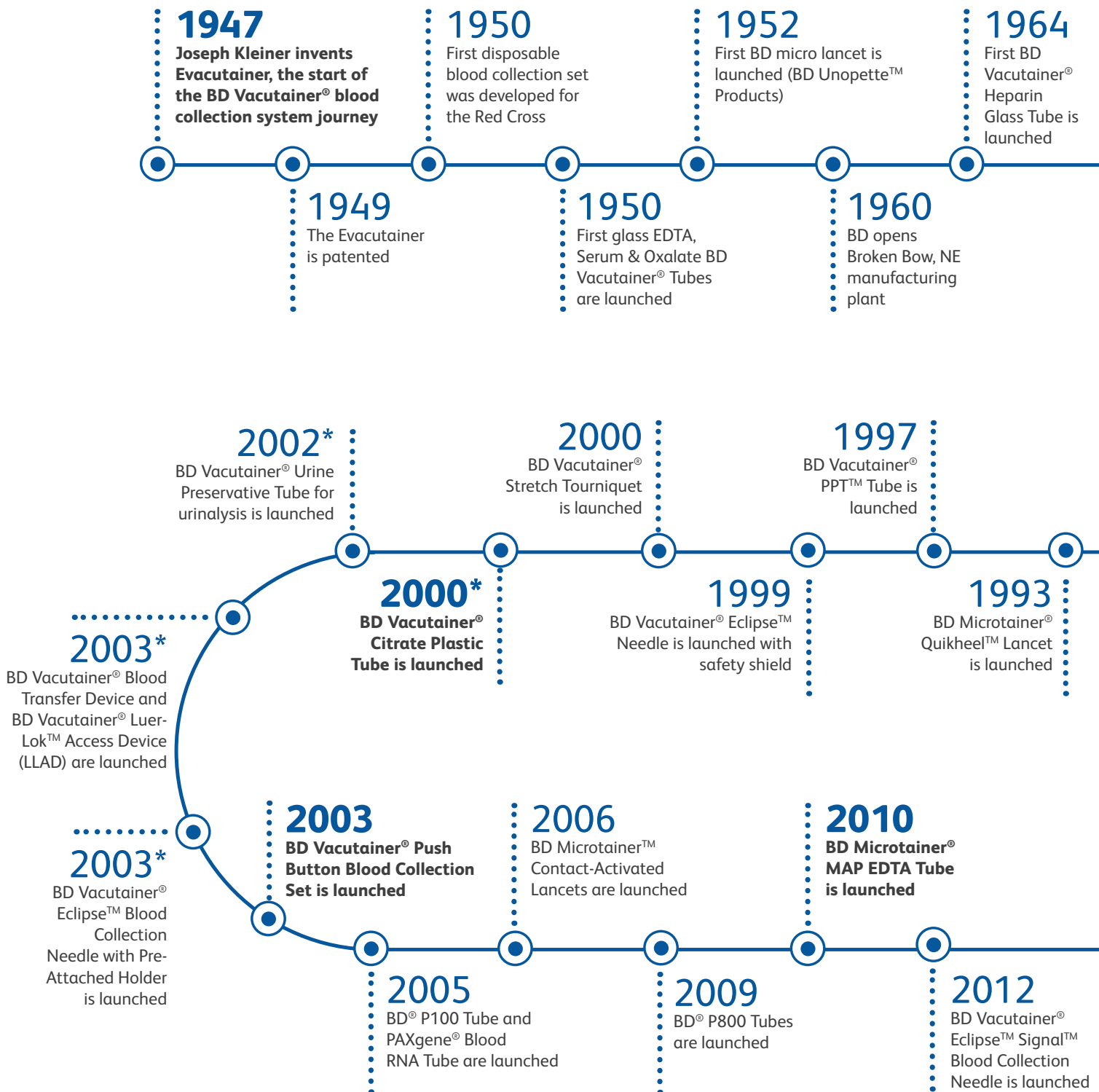


"We are implementing a new ESG strategy that builds on our commitment to improve and advance individual and public health at a global scale," said Tom Polen, chairman, CEO and president, BD. "We know that the health of our company, our planet, our communities and the people we serve are directly connected, and when we successfully address the health of one, we often solve for challenges in another. Together We Advance embraces these interconnections, with the ultimate goal of driving positive collective outcomes and a healthy, resilient world for all."



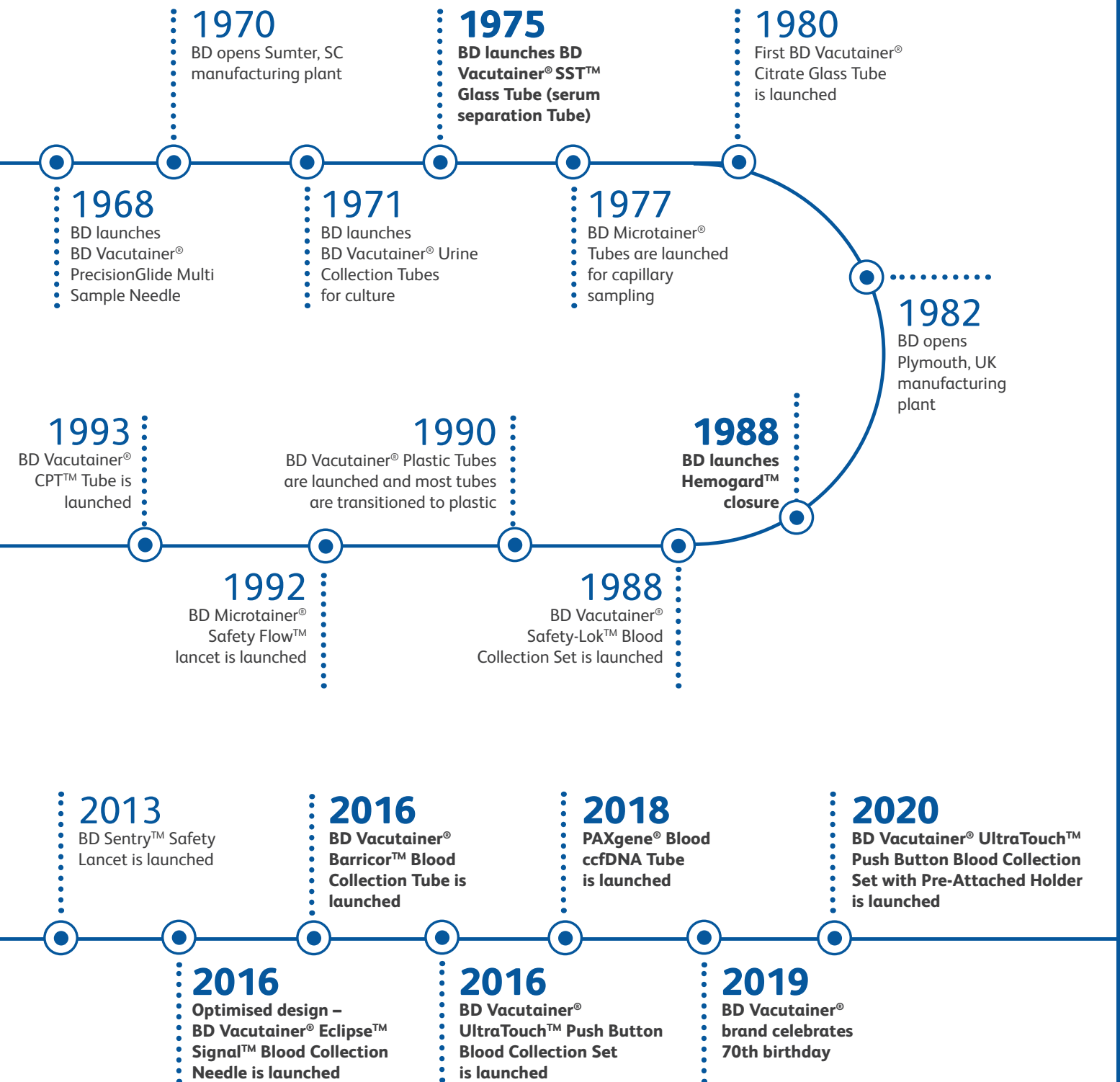
For more information about the company's ESG strategy and 2030+ goals, visit news.bd.com/esg

BD Vacutainer® System – a story of innovation



Over 70 years of better outcomes for patients and professionals.

The BD Vacutainer® family of solutions focuses on delivering diagnostic accuracy, specimen integrity and quality, a safe environment for patient and healthcare professionals, reduced patient pain, and total cost of ownership.



Thank you for trusting the BD Vacutainer® brand to enable accurate diagnostics that shape the course of care.

Patient safety

Specimen management and analysis

Driving safe and accurate specimen management and analysis throughout the patient journey

Did you know the majority of laboratory errors occur during the preanalytical phase?¹

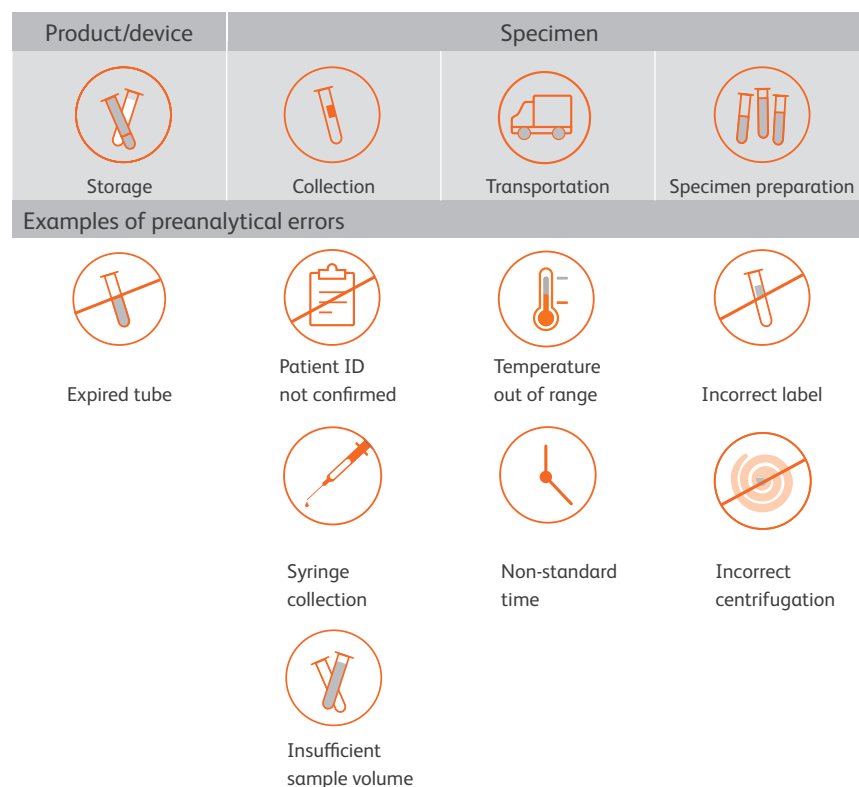
"The most commonly performed invasive medical procedure is wreaking havoc on how patients are being diagnosed, medicated and managed."

Dennis J. Ernst, Director of the Center for Phlebotomy Education*

A large proportion of clinical decisions are based on laboratory data. Because of this, laboratory errors have a major impact on the diagnostic and treatment pathways.¹

The preanalytical phase, step by step

Preanalytical errors can occur at any step during the process



About 2/3
of laboratory errors occur during the preanalytical phase²

Estimated
90%-95%
diagnostic delays are associated with error in preanalytical phase⁴

* Lab Draw Answer Book, Dennis J. Ernst. ISBN — 978-0-9700588-0-5. August, 2017

Poor sample quality contributes to errors² that may:

- > cause unnecessary patient suffering³
- > impact clinical outcomes⁵
- > if not understood, affect the ability to meet the requirements of ISO15189

3-12%

of hospital laboratory errors lead to adverse events³

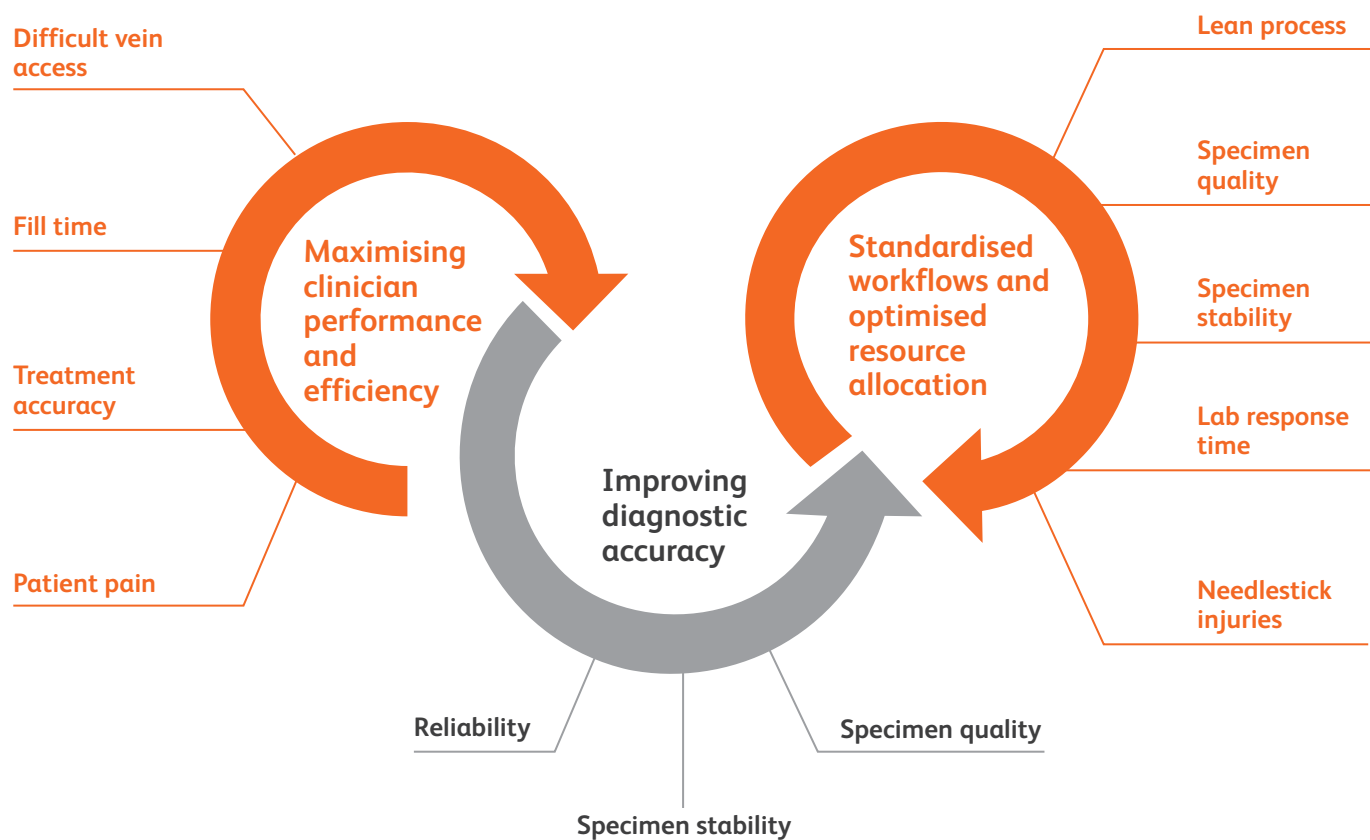
Most people will suffer a diagnostic error in their lifetime⁵

2 days

Increased median length of stay for patients with a contaminated blood culture⁶

Improving and standardising specimen management and analysis

Envisioning to drive improvements in following areas:



BD Professional Services

A range of services that may help you achieve your key performance goals



Ask your local BD representative for further information and BD professional services catalogue, available upon request.

BD Specimen Management portfolio

The BD portfolio offers a comprehensive range of products designed to enhance patient and healthcare worker safety through better specimen collection and management in the preanalytical phase



BD Vacutainer® Venous Blood Collection System:

Full range of tubes and venous access devices to meet laboratory and patient population needs.



BD Vacutainer® Closed Urine Collection System:

Aimed at reducing mixed growth and contaminated samples saving costs, time and diagnostic and treatment delays.



BD Arterial Blood Collection System:

Solutions to standardise collection of blood specimens for critical care testing.



BD Microtainer® Capillary Collection System:

A complete solution designed and developed for your most fragile patients.

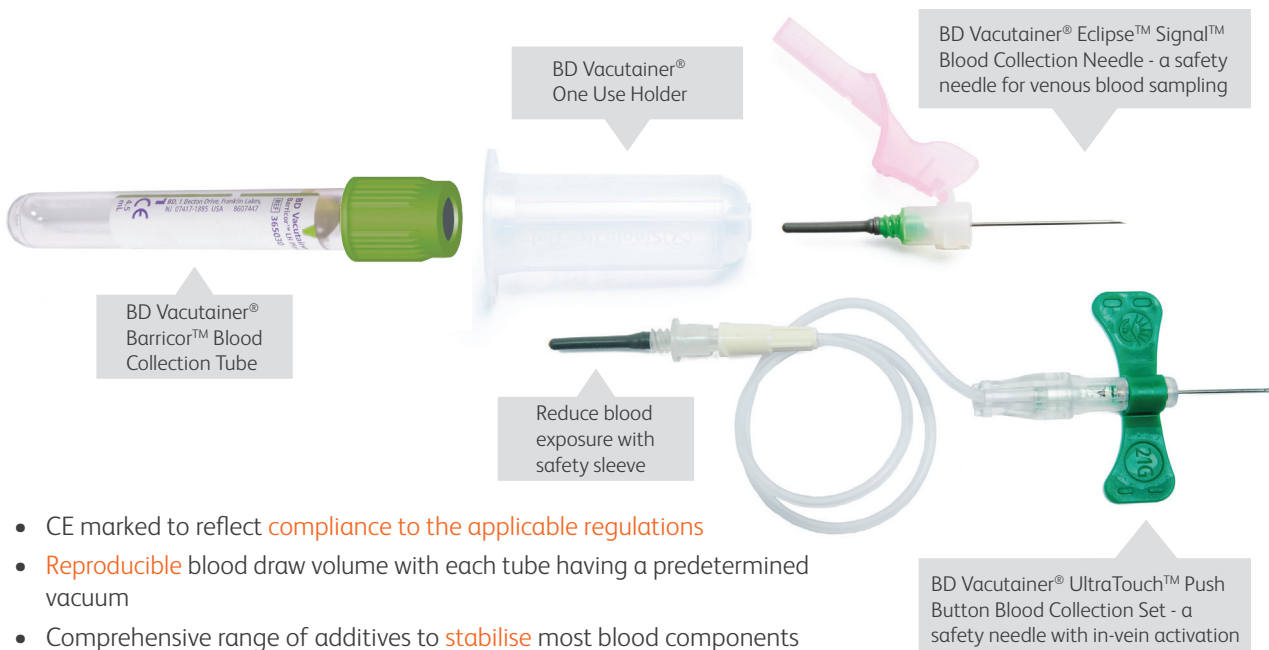


BD Innovative Solutions:

Specifically designed to meet emerging clinical and diagnostic needs.

BD Vacutainer® Blood Collection System

The BD Vacutainer® Blood Collection System is a closed evacuated system, which consists of BD Vacutainer® Tubes, Needles and Holders being used together as a system for the collection of venous blood.



- CE marked to reflect **compliance to the applicable regulations**
- **Reproducible** blood draw volume with each tube having a predetermined vacuum
- Comprehensive range of additives to **stabilise** most blood components
- BD Hemogard™ **safety** closure designed to protect users from blood exposure
- **Sterile** tube and needle to help prevent microbiological contamination of samples
- A range of labels to help with **traceability** of collected patient samples

Bloodstream Infection Management

Bloodstream Infection Management solution: enabling better specimen management and diagnostics throughout the complete analytical pathway

BD builds on its preanalytical expertise to offer an effective analytical, and postanalytical solution for Bloodstream Infection Management, including both clinical and technical elements that increase value for customers around the world.

The BD Bloodstream Infection Management solution enables better patient and user experience at the point of collection,^{8,9} aims to optimise volume of specimen for accurate diagnostics,¹⁰ point of care facilitation for earlier decision making,¹¹ and diagnostic workflow with microbiology informatics.

We operate in the key areas to maximise your clinical performance and efficiency, enhance diagnostic accuracy and timeliness, and optimise and standardise workflows, processes and procedures.

Why volume of blood cultured is important to the yield of pathogens.¹²

For the purpose of isolating pathogenic organisms, it has been demonstrated that the volume of blood sampled is the most determinant variable on adult patients with bacteraemia and fungaemia. It has been demonstrated that an increase in the volume of blood from 20 to 40 mL (2 to 4 blood culture vials) for culture increases the diagnostic yield by 19%, and an increase to between 40 and 60 mL leads to a further increase of 10% (simultaneously or a series of samples)¹³ within 24 hours¹³. In addition, the correct volume in each blood culture vial will decidedly improve diagnostic results¹⁴⁻¹⁹ and as a whole ensure greater clinical impact throughout the patient pathway.

84%
of blood vials are
NOT optimally
filled¹⁴

Volume of blood
collected is the single
most important
factor in recovery of
causative organism¹⁵

Specimen
volume is critical^{16,17}
Over-filling can lead
to false positives¹⁸

Under-filling
leads to low
detection
of bacteria¹⁶



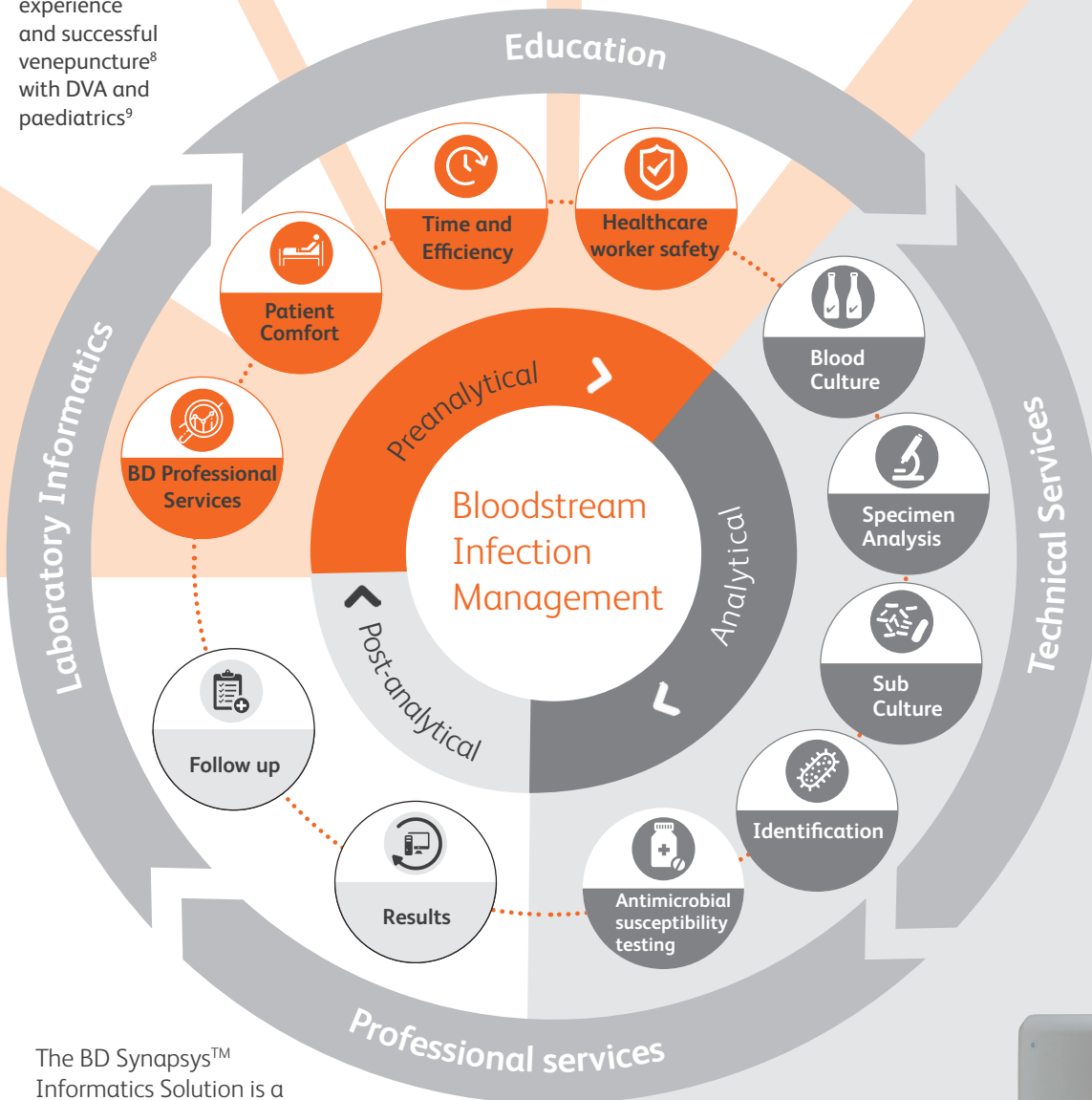


BD Vacutainer® UltraTouch™ Push Button Blood Collection Set has shown bench testing improvements in specimen volume and collection time¹⁰



Proven healthcare worker safety technology¹⁹

Improve patient experience and successful venepuncture⁸ with DVA and paediatrics⁹



The combination of BD BACTEC™ Plus Aerobic and Lytic Anaerobic media has been shown to reduce time to positivity, resulting in a decreased length of stay and significant improvement in mortality rates²⁰

The BD Synapsys™ Informatics Solution is a transformational informatics platform providing secure connectivity, integrated workflows, and on-demand actionable insights, all accessible anytime, anywhere.

Through real-time analytics, accessible by the ED, measure and drive continuous improvements efforts in blood collection practices to impact turnaround time, expedite decision-making, improve productivity, and simplify compliance.



The small footprint of the BD BACTEC™ FX40 instrument allows for on-site incubation that minimises the time to a positive microbiological result¹¹ promoting optimal patient management with both faster results and treatment.

BD Widerlab™ TII - Time & Temperature tracks time and temperature during transport


BD Widerlab™ TII - Time & Temperature tracks time and temperature at pre-determined time intervals. It is a highly automated solution that does not require intervention from healthcare providers. It aims to help reduce the incidence of preanalytical errors, enhances patient safety and improve efficiency.

This solution uses Radio Frequency Identification technology to monitor temperature at pre-determined intervals from sample dispatch to sample reception


It can be fully adapted as per the laboratory workflow. BD understands preanalytical processes and partners with clinical laboratories across EMEA and worldwide.




BD Widerlab™ TII - Time & Temperature

 Accurately monitors temperature at predetermined time intervals

 Measures temperature to help maintain/achieve compliance

 Aims to optimise your workflow for reduced laboratory turnaround time and less hands-on time

 Software provides automated and quick updates of sample time and temperature

Several collection sites



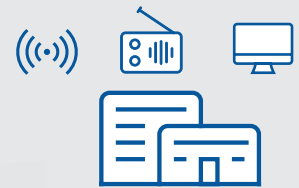
RFID Tag

Sample collection sites



RFID Tag

In transit



RFID Tag

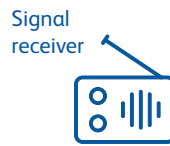
Clinical laboratory



RFID Tag
Accurate time and temperature at predetermined time intervals



Antenna
RFID tag and transport box identification

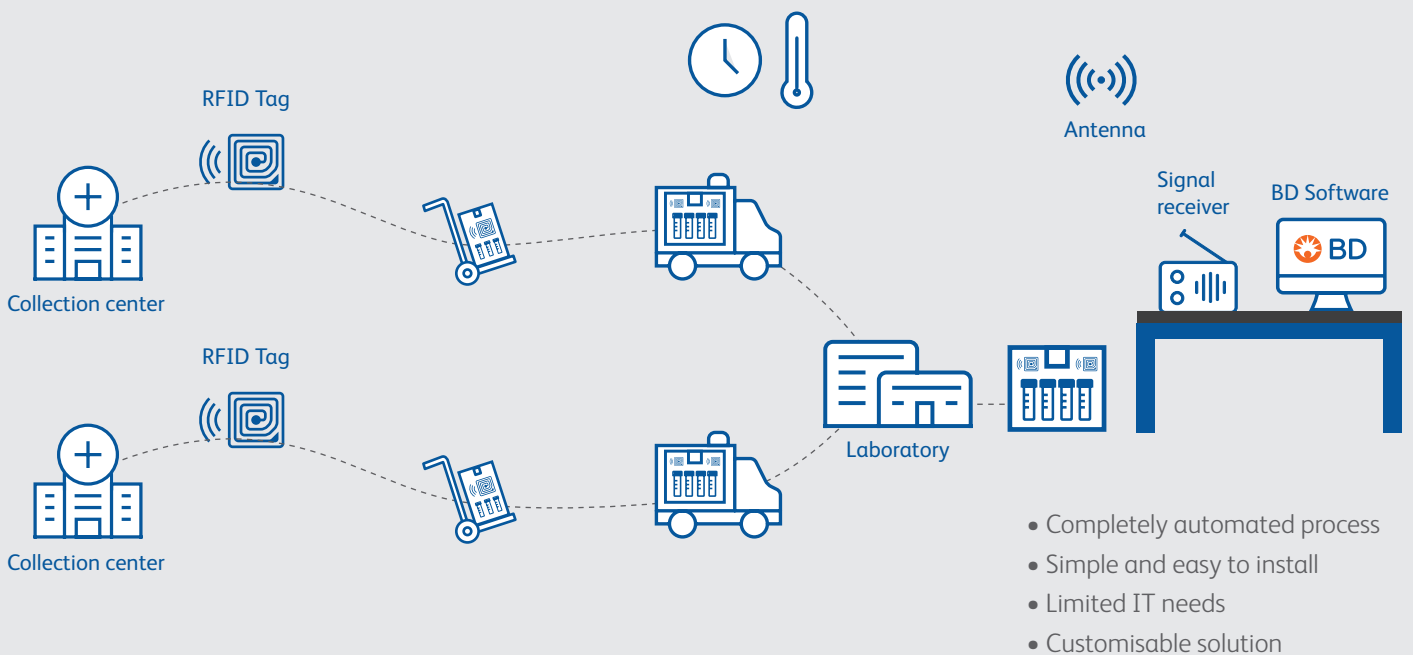


Signal receiver
Adaptable to laboratory workflows



BD Software
Large memory capacity
Automated data download
Personalised reports in Excel or PDF format
Data stored on your server

Solution overview



The RIGHT collection...

...using the RIGHT transport...




...within the RIGHT time frame...






















...at the RIGHT temperature...

...for the RIGHT analysis.

Venous blood sampling

Order of draw and specimen handling

Order of draw ²¹	Colour code	Tube type	OR	Order of draw ²¹	Colour code	Tube type
Discard tubes		EST or other suitable tube*			Blood culture	 

Order of draw ²¹	Colour code	Tube type	Recommended inversions	Minimum clotting time	Centrifugation conditions
Coagulation tubes		Sodium citrate, plastic	3-4	n/a	2000-2500 g (RCF) for 10-15 min. at 18-25 °C
Serum tubes, with or without separator		Serum with clot activator (silica particles)	5-6	60 min.	≤1300 g (RCF) for 10 min. at 18-25 °C
		Serum thrombin	5-6	5 min.	≤1300 g (RCF) for 10 min. at 18-25 °C
		BD RST (serum thrombin with gel)	5-6	5 min.	1500-2000 g (RCF) for 10min, 2000g (RCF) for 4 min, or 4000g (RCF) for 3 min at 23-27 °C
		BD SST™ II Advance (serum with gel)	6	30 min.	1300-2000 g (RCF) for 10min. at 18-25 °C
Heparin tubes, with or without separator		BD Barricor™	8	n/a	4000 x g (RCF) for 3min. 3000 x g (RCF) for 5 min. at 18–25 °C or alternative centrifugation conditions ²⁴
		Lithium & sodium heparin	8-10	n/a	≤1300 g (RCF) for 10 min. at 18-25 °C
		BD PST™ II (plasma with gel)	8-10	n/a	1300-2000 g (RCF) for 10 min. at 18-25 °C
EDTA tubes, with or without separator		EDTA	8-10	n/a	n/a
		PAXgene® DNA	8-10	n/a	n/a
		Blood banking	8-10	n/a	≤1300 g (RCF) for 10 min. at 18-25 °C
		BD PPT™ EDTA with gel	8-10	n/a	1100 g (RCF) for 10 min. at 18-25 °C
Glucose		Fluoride	8-10	n/a	≤1300 g (RCF) for 10 min. at 18-25 °C
Tubes with other additives		ACD	8-10	n/a	n/a
		Trace elements with EDTA	8-10	n/a	≤1300 g (RCF) for 10 min. at 18-25 °C
		Trace elements serum with clot activator (silica particles)	5-6	60 min.	1300 g (RCF) for 10 min. at 18-25 °C
		BD CPT™ Sodium Citrate or Sodium Heparin	8-10	n/a	Citrate tube 1500-1800 g (RCF) for 20 min. at 18-25 °C Heparin tube 1500-1800 g (RCF) for 15 min. at 18-25 °C
		BD™ P800	8-10	n/a	1100-1300 g (RCF) for 20 min. at 18-25 °C (8,5 mL tube) 1100-1300 g (RCF) for 10 min. at 18-25 °C (2 mL tube)
		BD™ P100	8-10	n/a	2500 g (RCF) for 20 min. at 18-25 °C (8,5 mL tube) 1000-3000 g (RCF) for 10 min. at 18-25 °C (2 mL tube)
		PAXgene® Blood ccfDNA Tube	8	n/a	1600-3000 g (RCF) for 15 min. at 15-25 °C
		PAXgene® Blood RNA Tube	8-10	n/a	n/a

IMPORTANT MIXING GUIDELINES

All BD Vacutainer® Tubes, except discard Tubes, require immediate mixing following collection. Insufficient mixing can result in inaccurate test results and the need to re-draw. Correct mixing technique is to gently invert (180° and back) each tube the recommended number of times shown in the recommended inversions column.

* Discard Tube is not required before blood collection for Anaerobic and Aerobic blood culture bottles.
n/a = not applicable

Venous blood sampling

Blood culture systems

BD BACTEC™ Blood Culture Media

BD, a leader in blood collection and blood culture for more than 40 years, offers clinicians and microbiology laboratories a unique, unmatched range of solutions providing:

- Safe specimen collection and transport
- Compatible, high-performing diagnostic systems
- Tools for active and real-time reporting
- High-quality training and support



Cat. no.	Product	Draw volume (mL)
442017	BD Bactec™ Plastic Mycosis Ic/F Culture Vials	8 - 10 mL of blood
442020	BD Bactec™ Plastic Bactec Peds Plus/F	8 - 10 mL of blood
442021	BD Bactec™ Plastic Lytic/10 Anaerobic/F Culture Vials	8 - 10 mL of blood
442022	BD Bactec™ Plastic Bactec Plus Anaerobic/F Cultural Vials	8 - 10 mL of blood
442023	BD Bactec™ Plastic Bactec Plus Aerobic/F Culture Vials	8 - 10 mL of blood
442027	BD BACTEC™ Standard/10 Aerobic/F Culture Vials	8 - 10 mL of blood
442288	BD Bactec™ Glass Myco/F Lytic Culture Vials (for Mycobacterial use)	8 - 10 mL of blood

All vials are supplied in boxes of 50 units

Venous blood sampling

Coagulation analysis

Sodium citrate

Trisodium citrate is used as an anticoagulant for coagulation investigations. It works as an anticoagulant by forming complexes with metal ions such as calcium, thereby inhibiting the coagulation cascade. Anticoagulation with trisodium citrate is reversible.

BD Vacutainer® Citrate Tubes contain buffered trisodium citrate in accordance with recommendations:

- 0.105 M or 0.109 M of buffered trisodium citrate solution, equivalent to 3.2% trisodium citrate
- 0.129 M of buffered trisodium citrate solution, equivalent to 3.8% trisodium citrate

Following blood collection, the blood to additive ratio will be 9:1.

BD Vacutainer® Citrate Tubes are also suitable for carrying out special test procedures such as the platelet function assay PFA-100®*.

Fill line marking

The significance of the correct ratio of blood to additive for coagulation samples is well documented.²⁷ The correct fill amount is critical for correct coagulation analysis. All BD Vacutainer® plastic coagulation Tubes have a mark indicating the minimum fill level.

BD Vacutainer® Plus Citrate Tube draw volume guide

Note: The Quantity of blood drawn into evacuated tubes varies with altitude, ambient temperature, barometric pressure, tube age, venous pressure and filling technique.

BD Vacutainer® Citrate Tubes

The plastic citrate tubes made from polyethylene terephthalate (PET) and polypropylene (PP) feature innovative tube geometry that minimises tube headspace and associated platelet activation to optimise activated partial thromboplastin time (APTT) monitoring of unfractionated heparin patients.

BD Vacutainer® Citrate Tubes are used worldwide and in many analytical coagulation systems:^{25,26}

- Clinically proven in multi-centre clinical trials for coagulation testing across all major patient populations.
- Evaluated with the most widely used coagulation analytical systems.

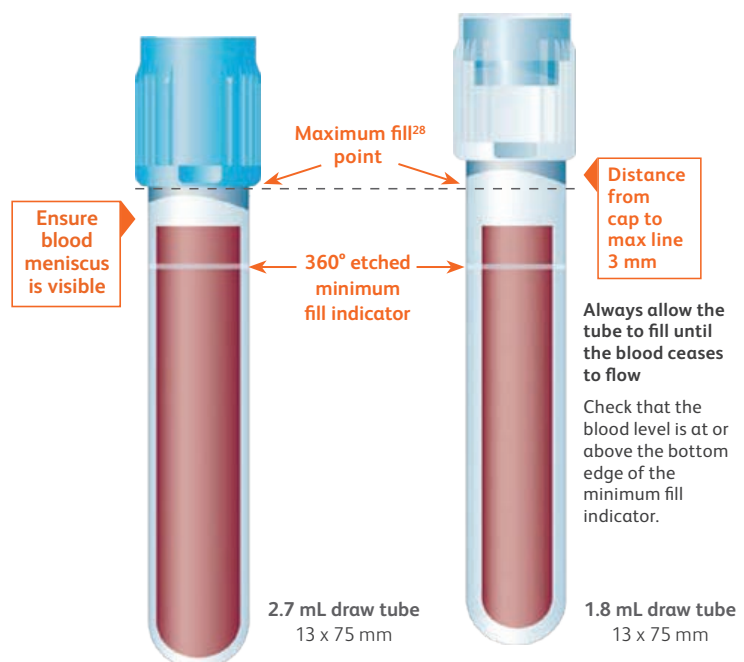


Image is for illustrative purposes only and is not actual size

* PFA-100 is a registered trade mark of Siemens.

Venous blood sampling

Coagulation analysis









Centrifugation conditions

For coagulation analyses, different plasma specifications can be obtained from the citrated blood:

- Platelet-poor plasma:
Plastic tubes: 2,000-2,500 g for 10-15 minutes at 18-25°C



BD Vacutainer® Citrate Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
363047	1.8	13 x 75	Trisodium citrate (0.109 M, 3.2%)	None	PET/PP	Paper	BD Hemogard™	
363097	1.8	13 x 75	Trisodium citrate (0.129 M, 3.8%)	None	PET/PP	Paper	BD Hemogard™	
368273	1.8	13 x 75	Trisodium citrate (0.109 M, 3.2%)	None	PET/PP	See thru	BD Hemogard™	
363093	1.8	13 x 75	Trisodium citrate (0.109 M, 3.2%)	None	PET/PP	Block	BD Hemogard™	
363048	2.7	13 x 75	Trisodium citrate (0.109 M, 3.2%)	None	PET/PP	Paper	BD Hemogard™	
363079	2.7	13 x 75	Trisodium citrate (0.129 M, 3.8%)	None	PET/PP	Paper	BD Hemogard™	
363095	2.7	13 x 75	Trisodium citrate (0.109 M, 3.2%)	None	PET/PP	Block	BD Hemogard™	
364305	2.7	13 x 75	Trisodium citrate (0.109 M, 3.2%)	None	PET/PP	See thru	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

Venous blood sampling

Serum analysis

Serum tubes, without separator

Serum tubes are available in glass and plastic (PET) variants. In glass tubes, the surface acts as a clot activator. In plastic tubes, silica particles are added as the clot activator. These tubes are labelled with the acronym CAT (clot activator tube).

Clotting times

The recommended minimum clotting time for the serum tubes is 60 minutes.

Centrifugation conditions










≤1300 g for 10 minutes at 18-25°C

Further information

Clinical and technical information is available on request.



BD Vacutainer® Serum Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
368492	2.0*	13 x 75	Silica (clot activator)	None	PET	Paper	BD Hemogard™	
368271	2.0*	13 x 75	Silica (clot activator)	None	PET	See thru	BD Hemogard™	
369032	4.0	13 x 75	Silica (clot activator)	None	PET	Paper	BD Hemogard™	
365904	4.0	13 x 75	Silica (clot activator)	None	PET	See thru	BD Hemogard™	
367624	5.0	13 x 75	No additive	None	Glass	Paper	BD Hemogard™	
367614	5.0	13 x 75	Silicone coated	None	Glass	Paper	BD Hemogard™	
368815	6.0	13 x 100	Silica (clot activator)	None	PET	Paper	BD Hemogard™	
367819	6.0	13 x 100	Silica (clot activator)	None	PET	See thru	BD Hemogard™	
367896	10.0	16 x 100	Silica (clot activator)	None	PET	Paper	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

*Partial-draw tube

Venous blood sampling

Serum analysis

BD Vacutainer® RST (Rapid Serum Tube)

This tube combines the advantages of a thrombin-based clot activator with a gel barrier, enabling rapid results and extended stability.

The main advantages of BD Vacutainer® Rapid Serum Tubes (RST) versus other serum tubes:

- High-quality serum production.²⁸
- Five-minute clotting time after the blood sample is taken.
- Reduced haemolysis, red cell hang-up and fibrin, compared to a comparator serum tube.²⁸
- Stable barrier between serum and clotted blood during transportation and storage, therefore better analyte stability.
- Workflow optimisation: short centrifugation time, sample processing and archiving in the primary tube.

Clotting times

The minimum recommended clotting time for BD Vacutainer® RST is 5 min between 23 and 27°C.



Centrifugation conditions

4,000 g for 3 minutes at 23-27°C or
2,000 g for 4 minutes at 23-27°C or
1,500-2,000 g for 10 minutes at 23-27°C

Further information

Clinical and technical information is available on request.

BD Vacutainer® RST Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
368774	5.0	13 x 100	Thrombin-based medical clotting agent	Gel	PET	Paper	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

BD Vacutainer® Thrombin Tubes (no separator)



The thrombin-based clot activator enables rapid clotting of the blood.

Clotting times

The minimum recommended clotting time for the thrombin tubes is 5 minutes.

Centrifugation conditions

≤1300 g for 10 minutes at 18-25°C

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
367817	4.8	13 x 75	Thrombin	None	PET	Paper	BD Hemogard™	
367811	6.0	13 x 100	Thrombin	None	PET	Paper	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

Venous blood sampling

Serum analysis

BD Vacutainer® SST™ II Advance Tubes

These tubes contain a gel barrier that separates the serum from the blood clot following centrifugation, preventing contamination of the serum. For example, in serum certain analytes such as potassium, phosphorus and glucose should be separated from the cells within a short time period - otherwise the results will be significantly impacted. Clinical evaluation of special chemistries such as therapeutic drugs, proteins, peptides, steroids and vitamins demonstrates a high degree of stability within the BD SST™ II Advance.^{29,30,31}

The main advantages of gel tubes versus non-gel tubes are:

- Stable barrier between serum and clotted blood during transportation and storage, leading to better analyte stability.
- Better sample quality.
- Workflow optimisation: short centrifugation time, sample processing and archiving in the primary tube.
- No requirement for secondary tubes, reducing the possibility of misidentification.

Clotting times

The minimum recommended clotting time for BD Vacutainer® SST™ II Advance Tubes is 30 minutes.

Centrifugation conditions

1,300-2,000 g for 10 minutes at 18-25 °C















Further information

Clinical and technical information is available on request.

Venous blood sampling

BD Vacutainer® SST™ II Advance Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additives	Separator	Material	Label	Cap closure	Cap colour
366882	2.5*	13 x 75	Silica (clot activator)	Gel	PET	Paper	BD Hemogard™	
367957	3.5	13 x 75	Silica (clot activator)	Gel	PET	Paper	BD Hemogard™	
368498	3.5	13 x 75	Silica (clot activator)	Gel	PET	See thru	BD Hemogard™	
368965	3.5	13 x 75	Silica (clot activator)	Gel	PET	Paper	BD Hemogard™	
368879	4.0	13 x 100	Silica (clot activator)	Gel	PET	See thru	BD Hemogard™	
367955	5.0	13 x 100	Silica (clot activator)	Gel	PET	Paper	BD Hemogard™	
366566	5.0	13 x 100	Silica (clot activator)	Gel	PET	See thru	BD Hemogard™	
368968	5.0	13 x 100	Silica (clot activator)	Gel	PET	Paper	BD Hemogard™	
366444	6.0	16 x 100	Silica (clot activator)	Gel	PET	Paper	BD Hemogard™	
367953	8.5	16 x 100	Silica (clot activator)	Gel	PET	Paper	BD Hemogard™	
366644	8.5	16 x 100	Silica (clot activator)	Gel	PET	See thru	BD Hemogard™	
366468	8.5	16 x 100	Silica (clot activator)	Gel	PET	Paper	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

* Partial-draw tube

Venous blood sampling

Serum

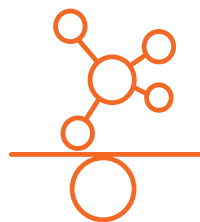
Turnaround time³²

Before centrifugation, serum samples require between 5 to 60 minutes to coagulate and several factors affect the process.



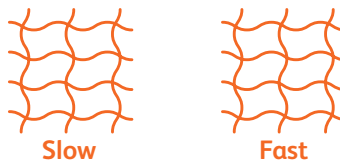
Sample quality³⁴⁻³⁹

- Serum is an acellular sample
- Coagulation processes increase the analytical variance
- Potassium levels are slightly elevated by the clotting process
- Long-term stability is high for the majority of analytes



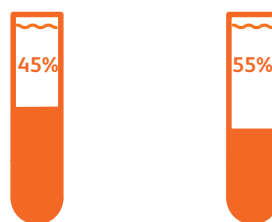
Fibrin Formation⁴⁰

Inadequate clotting may result in fibrin formation during and after centrifugation, which may interfere with some tests.



Sample yield²²

With serum samples, 44.3% mean yield from whole blood volume can be harvested.



Serum or plasma? An old question waiting for new answers

"There is an ongoing debate on what type of sample a clinical laboratory should use. While serum is still considered the gold standard and remains the required sample matrix for some assays, laboratories must consider turnaround time, which is an important metric for laboratory performance and, more importantly, plays a critical role in patient care. In addition, a body of evidence emphasises the choice of plasma samples in order to prevent modifications of some measurements due to the coagulation process and related interferences. Advantages and disadvantages of serum and plasma are discussed on the basis of current literature and evidence. In addition, data are provided on the current utilisation of the matrix (serum or plasma) in Italy and in other countries. Finally, a rationale for a possible shift from serum to plasma is provided."⁴¹

Plasma

Turnaround time³³

The anticoagulation action of heparin allows for immediate centrifugation of the specimen.

Sample quality³⁴⁻³⁹

- Plasma contains residual cells
- Analytical variance is reduced
- Potassium levels are unaffected by anticoagulation
- Analyte stability is often shorter than in serum samples

Fibrin formation⁴⁰

Fibrin artefacts are generally not present in plasma samples. Cold storage can activate coagulation.

Sample yield²³

With plasma samples, 55.2% mean yield from whole blood volume can be harvested.

Venous blood sampling

Plasma analysis

Lithium Heparin/Sodium Heparin

BD Vacutainer® Plasma Tubes for clinical chemistry are available with spray-dried sodium heparin or lithium heparin additives. Heparin acts as an anticoagulant by creating a complex with antithrombin III. This complex inhibits thrombin and the activated factor X and thus prevents coagulation.

Optimal anticoagulation is achieved in these tubes by using 17 IU pharmaceutical-grade heparin per mL of blood. The lithium heparin in BD Vacutainer® Tubes is spray dried onto the inner walls to achieve the best possible solubility. For clinical chemistry, lithium heparin is generally preferred over sodium heparin.

Tube mixing

To avoid micro-clotting, mix the BD Vacutainer® Heparin Tube with 8-10 inversions immediately after the blood sample has been taken.













Centrifugation conditions

≤1300 g for 10 minutes at 18-25°C.

Further information

Clinical and technical information is available on request.

BD Vacutainer® Heparin Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
368494	2.0*	13 x 75	Lithium heparin	None	PET	Paper	BD Hemogard™	
368272	2.0*	13 x 75	Lithium heparin	None	PET	See thru	BD Hemogard™	
368884	4.0	13 x 75	Lithium heparin	None	PET	Paper	BD Hemogard™	
368496	4.0	13 x 75	Lithium heparin	None	PET	See thru	BD Hemogard™	
367869	4.0	13 x 75	Sodium Heparin	None	PET	Paper	BD Hemogard™	
368886	6.0	13 x 100	Lithium heparin	None	PET	Paper	BD Hemogard™	
368889	6.0	13 x 100	Lithium heparin	None	PET	See thru	BD Hemogard™	
367876	6.0	13 x 100	Sodium Heparin	None	PET	Paper	BD Hemogard™	
367526	10.0	16 x 100	Lithium heparin	None	PET	Paper	BD Hemogard™	
368480	10.0	16 x 100	Sodium Heparin	None	Glass	Paper	Conventional	

All tubes are supplied in boxes of 100 units / cases of 1,000

* Partial-draw tube

Venous blood sampling

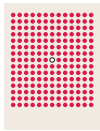
Plasma analysis

BD Vacutainer® Barricor™ Plasma Blood Collection Tubes

BD Vacutainer® Barricor™ is a revolutionary blood collection tube that delivers a consistently fast, clean and high-quality plasma sample to enable the most accurate results.

The design complements the BD Vacutainer® Blood Collection Tubes, and continues the BD heritage of ensuring best practice in the collection, transportation and processing of blood samples.

BD Barricor™ product features have been designed to ensure optimal performance. The cutting-edge mechanical separator speeds up throughput and enables workflow optimisation by harnessing the power of plasma.



Accuracy

BD Barricor™ is an innovative technology that provides greater confidence in the accuracy of laboratory results across a broad range of analytes enabling clinicians to act on reliable and credible results to deliver cutting-edge care and service.

- Prolonged stability and reduced interference for enhanced therapeutic drug monitoring⁴²
- Longer stability of analytes versus current plasma gel separator tubes and reduced temperature sensitivity in storage⁴³



Quality

BD Barricor™ mechanical separator technology delivers a leading-edge collection and analytical process by eliminating separator artefacts that interfere with testing, or could lead to instrument downtime. This innovation helps deliver the highest diagnostic quality and patient care.

- Superior sample quality compared to plasma gel tubes – 47% fewer platelets count versus BD Vacutainer® PST™ II Tubes⁴⁵
- Positive impact on KPI such as haemolysis rate⁴⁶



Fast diagnosis

BD Barricor™ delivers a faster time-to-result for all patients with no clotting time and a reduction in centrifugation time of up to 7 minutes.

- Separation in 3 minutes at 4000g⁴⁴
- Reduction of turnaround time (TAT), allowing compliance with key performance indicators (KPI)



Efficiency

BD Barricor™ has been designed to ensure optimal performance across the sample and laboratory workflow, providing opportunities for improving the total cost of operations.

- Greater range of analytes can be tested in a single tube
- Mechanical separator eliminates the risk of gel contamination of the sampling probe; causing probe blockages, leading to analyser downtime and maintenance

Venous blood sampling

Plasma analysis

Tube mixing

To avoid micro-clotting, mix the BD Vacutainer® Barricor™ Tube with 8 inversions immediately after the blood sample has been taken.

Centrifugation conditions

4000 x g (RCF) for 3min. 3000 x g (RCF) for 5 min. at 18–25 °C or alternative centrifugation conditions.²⁴












For infectious disease testing, centrifuge at 3,000 g for 10 minutes.⁴⁷

See www.bd.com/ifu

Further information

Clinical and technical information is available on request.

BD Vacutainer® Barricor™ Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
365050	3	13 x 75	Lithium heparin	Mechanical separator*	PET	Paper	BD Hemogard™	
365054	3	13 X 75	Lithium heparin	Mechanical separator*	PET	See thru	BD Hemogard™	
365055	3	13 X 75	Lithium heparin	Mechanical separator*	PET	Block	BD Hemogard™	
365053	3.5*	13 X 100	Lithium heparin	Mechanical separator*	PET	Paper	BD Hemogard™	
365087	3.5*	13 x 100	Lithium heparin	Mechanical separator*	PET	Block	BD Hemogard™	
365049	4.5	13 x 100	Lithium heparin	Mechanical separator*	PET	Paper	BD Hemogard™	
365052	4.5	13 X 100	Lithium heparin	Mechanical separator*	PET	See thru	BD Hemogard™	
365051	4.5	13 X 100	Lithium heparin	Mechanical separator*	PET	Block	BD Hemogard™	
365081	5	13 X 100	Lithium heparin	Mechanical separator*	PET	See thru	BD Hemogard™	
365056	5.5	13 X 100	Lithium heparin	Mechanical separator*	PET	Paper	BD Hemogard™	
365057	5.5	13 X 100	Lithium heparin	Mechanical separator*	PET	See thru	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

* Partial-draw tube

Venous blood sampling

Plasma analysis

BD Vacutainer® PST™ II Tubes

These tubes contain a gel barrier and spray-dried lithium heparin additive. The inert barrier separates the plasma from the blood cells during centrifugation, preventing contamination of the plasma. For example, in plasma certain analytes such as potassium, phosphorus and glucose should be separated from the cells within a few hours, otherwise the results will be significantly impacted. Clinical evaluation of special chemistries such as therapeutic drugs, proteins, peptides, steroids and vitamins demonstrates a high degree of stability within BD PST™ II Tubes.⁴⁸⁻⁵⁰

The main advantages of gel tubes versus non-gel tubes are:

- Stable barrier between plasma and clotted blood during transportation and storage, therefore better analyte stability.
- Better sample quality.
- Workflow optimisation: short centrifugation time, sample processing and archiving in the primary tube.
- No requirement for secondary tubes, reducing the possibility of misidentification.



Effects of temperature

BD Vacutainer® PST™ II Tubes should be stored at 4-25°C and protected from direct sunlight during storage. Cooling of the tube by or during centrifugation can affect the movement. The optimum separation of sediment and plasma is achieved at a temperature of 20-25°C.

Tube mixing

To avoid micro-clotting, mix the BD Vacutainer® PST™ II Tube with 8-10 inversions immediately after the blood sample has been taken.

Centrifugation conditions

1,300-2,000 g for 10 minutes at 18-25°C.

Further information

Clinical and technical information is available on request.

BD Vacutainer® PST™ II Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
367374	3.0	13 x 75	Lithium heparin	Gel	PET	Paper	BD Hemogard™	
368497	3.0	13 x 75	Lithium heparin	Gel	PET	See thru	BD Hemogard™	
367376	4.5	13 x 100	Lithium heparin	Gel	PET	Paper	BD Hemogard™	
366567	4.5	13 x 100	Lithium heparin	Gel	PET	See thru	BD Hemogard™	
367378	8.0	16 x 100	Lithium heparin	Gel	PET	Paper	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

Venous blood sampling

Glucose analysis

Glucose and Lactate determination

BD Vacutainer® Glucose Stabilisation Tubes all contain a sodium fluoride antiglycolytic agent and are available with either potassium oxalate, disodium EDTA or sodium heparin anticoagulant.

Glucose values in unpreserved blood samples decrease quickly after collection as glucose is metabolised by the blood cells. The sodium fluoride additive stops the enzymatic activity of the glycolytic pathway.

HbA1c determination

One advantage of the Fluoride/EDTA tube over the Fluoride/Oxalate tube is that the HbA1c marker can be determined from the same tube, so there is no need to take an additional sample.

Tube mixing

To avoid micro-clotting, mix the BD Vacutainer® Glucose Tube with 8-10 inversions immediately after the blood sample has been taken.










Centrifugation conditions

≤1300 g for 10 minutes at 18-25°C

Further information

Clinical and technical information is available on request.

BD Vacutainer® Tubes for glucose and lactate determination

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
368920	2.0*	13 x 75	Sodium fluoride (2.5 mg/mL) / Potassium oxalate (2.0 mg/mL)	None	PET	Block	BD Hemogard™	
368520	2.0*	13 x 75	Sodium fluoride (1.5 mg/mL) / Disodium EDTA (3.0 mg/mL)	None	PET	Block	BD Hemogard™	
367933	2.0	13 x 75	Sodium fluoride (1.5 mg/mL) / Disodium EDTA (3.0 mg/mL)	None	PET	See thru	BD Hemogard™	
368921	4.0	13 x 75	Sodium fluoride (2.5 mg/mL) / Potassium oxalate (2.0 mg/mL)	None	PET	Paper	BD Hemogard™	
368521	4.0	13 x 75	Sodium fluoride (1.5 mg/mL) / Disodium EDTA (3.0 mg/mL)	None	PET	Paper	BD Hemogard™	
367764	5.0	13 x 75	Sodium fluoride (4.0 mg/mL) / Sodium heparin (281 U/mL)	None	Glass	Paper	BD Hemogard™	
368201	5.0	13 x 100	Sodium fluoride (2.5 mg/mL) / Potassium oxalate (2.0 mg/mL)	None	PET	Paper	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

* Partial-draw tube

Venous blood sampling

Haematology

EDTA

EDTA (ethylenediaminetetraacetic acid) salts are used to anticoagulate whole blood for haematological investigations, as the cellular components of the blood are particularly well preserved by EDTA. The anticoagulation is achieved by the EDTA forming complexes with metal ions such as calcium, therefore inhibiting the coagulation cascade. Anticoagulation with EDTA is irreversible.

The EDTA concentration in BD Vacutainer® Tubes is 1.8 mg/mL of whole blood, as recommended by the International Council Society of Haematology (ICSH).⁵¹ The ICSH recommends dipotassium EDTA salt (K₂EDTA) for haematological investigations. BD Vacutainer® plastic (PET) Tubes are available with spray dried K₂EDTA and K₃EDTA.













Tube mixing

To avoid micro-clotting, mix the EDTA tube with 8-10 inversions immediately after the blood sample has been taken.

Further information

Clinical and technical information is available on request.

BD Vacutainer® K₂EDTA Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
362072	3.0*	13 x 75	K ₂ EDTA	None	PET	Paper	BD Hemogard™	
368841	2.0*	13 x 75	K ₂ EDTA	None	PET	Paper	BD Hemogard™	
368274	2.0*	13 x 75	K ₂ EDTA	None	PET	See Thru	BD Hemogard™	
368856	3.0*	13 x 75	K ₂ EDTA	None	PET	Paper	BD Hemogard™	
368499	3.0*	13 x 75	K ₂ EDTA	None	PET	See Thru	BD Hemogard™	
368861	4.0	13 x 75	K ₂ EDTA	None	PET	Paper	BD Hemogard™	
367862	4.0	13 x 75	K ₂ EDTA	None	PET	See Thru	BD Hemogard™	
367864	6.0	13 x 100	K ₂ EDTA	None	PET	Paper	BD Hemogard™	
365900	6.0	13 x 100	K ₂ EDTA	None	PET	See Thru	BD Hemogard™	
367525	10.0	16 x 100	K ₂ EDTA	None	PET	Paper	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

* Partial-draw tube

Venous blood sampling

Haematology





EDTA-dependent pseudothrombocytopenia

Pseudothrombocytopenia (PCTP) is a rare phenomenon that occurs when auto-antibodies cause platelet clumping in whole blood stored in EDTA Tubes.^{52,53} EDTA-induced platelet clumping results in false low platelet counts that may lead to an incorrect diagnosis of bleeding diathesis.^{52,53} Platelet clumps may also be mistaken for white blood cells and cause false high white blood cell counts.⁵⁴

The simplest way to correct EDTA-dependent PCTP is by taking another blood sample and analysing it immediately, since platelet clumping increases over time.⁵⁵ Another way to avoid this problem is by choosing another anticoagulant (e.g., *acid citrate dextrose (ACD)* or *sodium citrate*).⁵⁶⁻⁵⁹ When determining cell counts, please keep in mind that some anticoagulants dilute the blood.



BD Vacutainer® K₃EDTA Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
367836	2.0*	13 x 75	K ₃ EDTA	None	PET	Block	BD Hemogard™	
368857	3.0*	13 x 75	K ₃ EDTA	None	PET	Block	BD Hemogard™	
368270	4.0	13 x 75	K ₃ EDTA	None	PET	See thru	BD Hemogard™	
368860	4.0	13 x 75	K ₃ EDTA	None	PET	Block	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

* Partial-draw tube

Venous blood sampling

Speciality Tubes




BD Vacutainer® Crossmatch Tubes

BD Vacutainer® Crossmatch Tubes are available with either EDTA or clot activator additives. The BD Vacutainer® Crossmatch Tube is identified by:

- a pink cap
- a large block label



BD Vacutainer® Crossmatch Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
366164	4.0	13 x 75	K ₂ EDTA	None	PET	Crossmatch	BD Hemogard™	
367941	6.0	13 x 100	K ₂ EDTA	None	PET	Crossmatch	BD Hemogard™	
368817	6.0	13 x 100	Silica (clot activator)	None	PET	Crossmatch	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

Blood group determination



The anticoagulant Acid Citrate Dextrose (ACD) is used for erythrocyte conservation. ACD is available in two solutions, A and B, each with different mixture ratios.

Anticoagulant	ACD solution A	ACD solution B
Na ₃ citrate	3.30 mg/mL	1.89 mg/mL
Citric acid	1.20 mg/mL	0.69 mg/mL
Dextrose	3.68 mg/mL	2.10 mg/mL
Potassium sorbate	0.03 mg/mL	0.03 mg/mL

The figures represent the final concentration in the blood in each case.



BD Vacutainer® Tubes for blood group determination

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
367756	6.0	13 x 100	ACD solution B	None	Glass	Paper	BD Hemogard™	
366645	8.5	16 x 100	ACD solution A	None	Glass	Paper	Conventional	

All tubes are supplied in boxes of 100 units / cases of 1,000

Venous blood sampling

Speciality tubes

Trace element determination

BD Vacutainer® Tubes for trace element determination contain controlled amounts of specific elements for trace element analysis. Maximum concentrations are defined for the trace elements antimony, arsenic, lead, chromium, iron, cadmium, calcium, copper, magnesium, manganese, mercury, selenium and zinc that could be extracted by blood from the tube itself or the stopper.

Every production batch is checked and only released if the given maximum value is not exceeded. The values given take into account the use of a straight BD Blood Collection Needle.




BD Vacutainer® Trace Element Tube Contamination Upper Limits

Analyte	Glass µg/L	PET µg/L	Analyte	Glass µg/L	PET µg/L
Antimony	0.8	.*	Lead	2.5	0.3
Arsenic	1.0	0.2	Magnesium	60	40
Cadmium	0.6	0.1	Manganese	1.5	1.5
Calcium	400	150	Mercury**	-	3.0
Chromium	0.9	0.5	Selenium	-	0.6
Copper	8.0	5.0	Zinc	40	40
Iron	60	25			

* BD Vacutainer® trace element PET Tubes should not be used for antimony testing.

** Water extraction analysed by cold vapour, all others ICP-MS


BD Vacutainer® Tubes for trace element determination

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
368380	6.0	13 x 100	Silica (clot activator)	None	PET	Paper	BD Hemogard™	
368381	6.0	13 x 100	K ₂ EDTA	None	PET	Paper	BD Hemogard™	
367735	7.0	13 x 100	Sodium heparin	None	Glass	Paper	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

BD Vacutainer® K₃EDTA/Aprotinin Tubes

BD Vacutainer® K₃EDTA Tubes contain Aprotinin, a protein stabiliser


Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
361017	5.0	13 x 75	Aprotinin (250 IU)/K ₃ EDTA	None	Glass	Paper	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

BD Vacutainer® EST Tubes

BD Vacutainer® EST Tubes do not have any additives and are suitable as a secondary tube for anticoagulated blood samples, for example for taking plasma samples from blood bags. The BD Vacutainer® EST™ Tube can also be used as a discard tube.

BD Vacutainer® EST Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
362725	3.0	13 x 75	No additive	None	PET	See thru	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

Cell and biomarker preservation

BD Vacutainer® CPT™ Blood Collection Tubes

BD Vacutainer® CPT™ (Cell Preparation Tube)

The BD CPT™ containing FICOLL™* and separation gel is a one-step system that provides a simple method for isolating peripheral blood mononuclear cells (PBMCs) - lymphocytes and monocytes, from whole blood.

The tube provides a sample-to-yield solution, eliminating stages of blood transfer, preparation of FICOLL™ and manual gradient separation. Waiting time is significantly reduced as centrifugation can be carried out with the brakes enabled.

The tube can yield up to 1.3 million lymphocytes and monocytes per mL of whole blood with centrifugation times of 15 or 20 minutes. The BD CPT™ Tube enables:

- Preparation and consistency
 - Standardised process when compared to manual FICOLL™ gradient separations
 - Reproducibility between sample preparations and technical operators
 - Less blood exposure for laboratory staff
- Faster separations
 - Blood draw to centrifuge - FICOLL™ is contained in the tube enabling fast gradient separation
 - Reduce waiting times during centrifugation with brakes enabled
- Post separation
 - The gel barrier provides clear cell separation and no aliquoting or additional tubes are required
 - Separated sample can be transported in BD CPT™ Tube
 - Cells are stable in the BD CPT™ Tube for up to 24 hours, depending on downstream application



The BD CPT™ Tube is CE marked for *in vitro* diagnostic use.




Further information

Clinical and technical information is available on request.

Centrifugation conditions**

Sodium Heparin 1,500-1,800 g for 15 minutes at 18-25°C
 Sodium Citrate 1,500-1,800 g for 20 minutes at 18-25°C

BD Vacutainer® CPT™ Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
362781	4.0	13 x 100	Sodium citrate 0.45 mL 0.1 M/1.0 mL FICOLL™	Gel	Glass	Transparent	Conventional	
362782	8.0	16 x 125**	Sodium citrate 1.0 mL 0.1 M/2.0 mL FICOLL™	Gel	Glass	Transparent	Conventional	
362780	8.0	16 x 125**	Sodium heparin 132 USP Units in 1.0 mL PBS/2.0 mL FICOLL™	Gel	Glass	Transparent	Conventional	

All tubes are supplied in cases of 60 units

Available to buy online at www.bdbiosciences.com - search CPT

* FICOLL is a registered trademark of GE Healthcare Companies.

**Please note: These tubes are longer than conventional blood collection tubes. Please ensure that the tubes are free to swing when placing them into the centrifuge.

Cell and biomarker preservation

PAXgene® Blood ccfDNA Tube

PAXgene® Blood ccfDNA Tube

The PAXgene® Blood ccfDNA Tube was developed by PreAnalytix, a joint venture between QIAGEN and BD.

The PAXgene® Blood ccfDNA Tube is a plastic, evacuated tube intended for the collection, storage and transport of human blood and stabilisation of DNA. This tube is used to isolate circulating cell-free DNA (ccfDNA) from plasma and/or genomic DNA (gDNA) from a nucleated cellular fraction.

The PAXgene® Blood ccfDNA Tube ensures:

- Immediate stabilisation of ccfDNA and/or gDNA for the following duration and temperature ranges:⁶⁰

Length of stabilization of whole blood	<ul style="list-style-type: none"> • 2-37°C for up to 3 days • 2-30°C for up to 7 days • 2-25°C for up to 10 days Do not store blood-filled tubes below 2°C.
ccfDNA stabilization in plasma in secondary tube	<ul style="list-style-type: none"> • 2-25 °C for up to 3 days • 2-8°C for up to 7 days Plasma can be stored frozen at -20 or -80°C for at least 1 year (long term study ongoing)
Stabilization of gDNA in nucleated cellular fraction post centrifugation	<ul style="list-style-type: none"> • 2-25 °C for up to 3 days • 2-8°C for up to 7 days Nucleated cellular fraction can be stored frozen at -20°C or below for at least 1 year (long-term study ongoing) and is robust against at least three freeze/thaw cycles.



- Analysis of methylated markers⁶⁰
A proprietary non-crosslinking stabilisation chemistry preserves ccfDNA without cross-linking challenges to optimise sensitivity and specificity for genetic biomarker downstream analysis*.
- ccfDNA & gDNA
Possible extraction from a single tube after centrifugation for parallel analyte analysis.
- Compatibility with NGS and qPCR quantification methods
- Simplified centrifugation protocols, with flexibility at 1600-3000 g (RCF) for 15min.

Performance characteristics established with 18S ribosomal and DYS14 Y-chromosomal ccfDNA fragments in plasma.

For more information please visit www.PreAnalytix.com


The PAXgene® Blood ccfDNA Tube is CE marked for in vitro diagnostic use.

Further information

Clinical and technical information is available on request.



PAXgene® Blood ccfDNA Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
768165	10	16 x 100	Proprietary	None	PET	Paper with 2D barcode	BD Hemogard™	

All tubes are supplied in cases of 100 units

*Users must validate use of product for their specific molecular diagnostic assay.

Cell and biomarker preservation

PAXgene® Blood RNA Tube

PAXgene® Blood RNA Tube

The PAXgene® Blood RNA Tube was developed by PreAnalytiX, a joint venture between QIAGEN and BD.

The PAXgene® Blood RNA Tube contains a proprietary reagent that immediately stabilises RNA. The PAXgene® Blood RNA Tube ensures:

- Immediate stabilisation of cellular RNA in whole blood
The cellular RNA will be stable for:⁶¹
3 days – whole blood at room temperature (18-25°C)
5 days – refrigerated whole blood (2-8°C)
11 years – frozen whole blood (-20°C and -70°C)*
- RNA yield
The yield, dependent upon the sample and the RNA isolation kit, is $\geq 3 \mu\text{g}$ for > 95% of the samples (healthy subjects with a leukocyte count of $4.8 - 11 \times 10^6/\text{mL}$)
- RNA quality
The A_{260}/A_{280} ratio is 1.8-2.2 for 95% of all samples. Genomic DNA contamination is 1% in $\geq 95\%$ of all samples



- Increased traceability
The PAXgene® Blood RNA Tube has a human readable and 2D barcode label. Each tube has a unique identification code that can be associated to the patient blood specimen

For more information please visit www.PreAnalytiX.com.

The PAXgene® Blood RNA Tube is CE marked for *in vitro* diagnostic use.**

Further information

Clinical and technical information is available on request.



PAXgene® Blood RNA Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
762165	2.5	16 x 100	Proprietary	None	PET	Paper with 2D barcode	BD Hemogard™	

All tubes are supplied in cases of 100 units

Available to buy online at www.bdbiosciences.com - search PAXgene RNA

**Immediately
stabilises
RNA**

* Long-term study of blood storage in PAXgene Blood RNA Tubes is ongoing.

** Performance characteristics of the PAXgene Blood RNA System have been established with FOS and IL1B gene transcripts. The user is responsible for establishing appropriate PAXgene Blood RNA System performance characteristics for other target transcripts.

Cell and biomarker preservation

PAXgene® Blood DNA Tube

PAXgene® Blood DNA Tube

The PAXgene® Blood DNA Tube was developed by PreAnalytiX, a joint venture between QIAGEN and BD.

The PAXgene® Blood DNA Tube contains a proprietary EDTA formulation that immediately stabilises genomic DNA (gDNA). The PAXgene® Blood DNA Tube ensures sufficient DNA quantity and quality for molecular diagnostic assays from whole blood.

Documented DNA stability and performance data

DNA samples purified from the 2.5 mL draw volume tube will have a ratio (A_{260}/A_{280}) of 1.7-1.9 and a DNA concentration of ≥ 12.5 ng DNA/ μ l eluate for 95% of samples and ensure DNA stability after blood collection for:⁶²

- 14 days at room temperature (18-25°C)
- 28 days refrigerated (2-8°C)
- 3 days at 35°C

Increased traceability

The PAXgene® Blood DNA Tube has a human readable and 2D barcode label. Each tube has a unique identification code that can be associated with the patient blood specimen.



For more information please visit www.PreAnalytiX.com.


The PAXgene® Blood DNA Tube is CE marked for *in vitro* diagnostic use.

Further information

Clinical and technical information is available on request.



PAXgene® Blood DNA Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
761165	2.5	13 x 75	Proprietary	None	PET	Paper with 2D barcode	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

Available to buy online at www.bdbiosciences.com - search PAXgene DNA

Cell and biomarker preservation

BD Vacutainer® PPT™ Blood Collection Tubes

BD Vacutainer® PPT™ (Plasma Preparation Tube)

The BD Vacutainer® PPT™ Plasma Preparation Tube is used to separate undiluted plasma from whole blood for molecular diagnostic tests. These methods include, but are not limited to, polymerase chain reaction (PCR) or branched DNA (bDNA) amplification techniques. The BD Vacutainer® PPT™ Tube is also applicable to other molecular diagnostic analyses where an undiluted plasma specimen is required. The BD Vacutainer® PPT™ Tube ensures:

- Safe handling of infectious samples and no re-labelling
Plasma is prepared in the closed BD Vacutainer® Tube that can be directly transported, eliminating the need for aliquoting from primary BD Vacutainer® Tube to secondary container and re-labelling.
- Whole blood may be stored in the BD PPT™ Tube up to six hours prior to centrifugation. Following centrifugation, the gel barrier prevents plasma from coming into contact with blood cells. Plasma sample stability is dependent on the application.^{63,64}

Plasma may be stored frozen in situ in the BD Vacutainer® PPT™ Tube. However, freezing plasma in situ in BD Vacutainer® PPT™ Tubes may be prohibited for some assays and the assay manufacturer's guidelines should be consulted.

The BD Vacutainer® PPT™ Tube is CE marked for *in vitro* diagnostic use.






Further information

Clinical and technical information is available on request.

Centrifugation conditions

1,100 g for 10 minutes at 18-25°C

BD Vacutainer® PPT™ Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
362791	5.0	13 x 100	K ₂ EDTA	Gel	PET	Paper	BD Hemogard™	
362795	5.0	13 x 100	K ₂ EDTA	Gel	PET	See thru	BD Hemogard™	
362799	8.5	16 x 100	K ₂ EDTA	Gel	PET	See thru	BD Hemogard™	

All tubes are supplied in boxes of 100 units / cases of 1,000

Available to buy online at www.bdbiosciences.com - search PPT

Cell and biomarker preservation

BD® P100 Tubes for stabilising proteins

The BD® P100 Tube is a plasma protein preservation tube that contains K₂EDTA anticoagulant and a broad spectrum protease inhibitor cocktail optimised for human blood. The 8.5 ml BD® P100 Tube also features a mechanical separator which provides high-quality plasma suitable for many downstream protein analysis platforms including mass spectrometry and immunoassays thanks to significant reduction in cellular contamination and increased stability of plasma proteins.

Centrifugation

For best sample quality, the centrifugation of the BD® P100 Tube should be performed in a swing-out centrifuge as soon as possible after the blood sample has been collected. Use of a fixed 45° angle rotor is possible.

Optimum centrifugation conditions for a 8.5 mL tube:
2,500 g for 20 minutes

If 2,500 g cannot be achieved:
1,600 g for 30 minutes or
1,100 g for 30 minutes

Optimum centrifugation conditions for a 2.0 mL tube:
1,000 - 3,000 g for 10 minutes

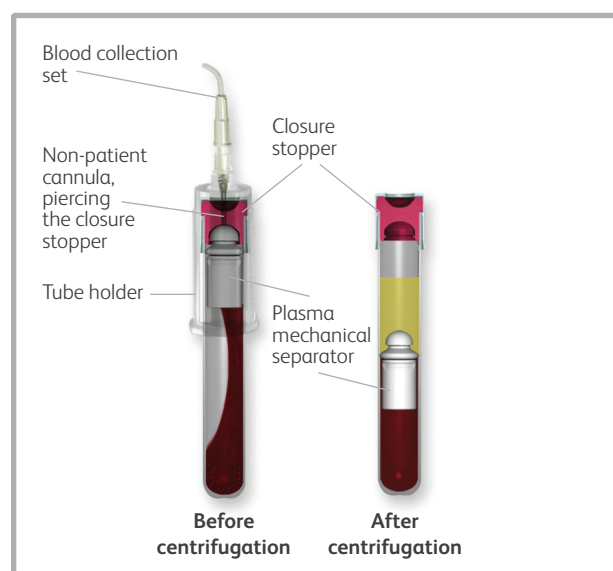


The BD® P100 plasma protein tube is for Research Use Only (RUO). Not for use in diagnostic procedures.



Further information

Clinical and technical information is available on request.

Mechanical plasma separator in a 8.5 mL tube



BD® P100 Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
366422	2.0	13 x 75	K ₂ EDTA/Protease inhibitor	None	PET	Paper	BD Hemogard™	
366448	8.5	16 x 100	K ₂ EDTA/Protease inhibitor	Mechanical separator*	PET	Paper	BD Hemogard™	

tubes are supplied in cases of 20 (366422) and 24 (366448)

Available to buy online at www.bdbiosciences.com - search P100

Cell and biomarker preservation

BD® P800 Tubes for measuring plasma metabolic markers

The BD® P800 Tube contains a proprietary cocktail of protease, esterase and dipeptidyl peptidase IV (DPP-IV) inhibitors that immediately solubilises during blood collection. The BD® P800 Tube provides preservation of the incretin peptides released during feeding - glucagon like peptide-1 (GLP-1), gastric inhibitory peptide (GIP), glucagon and oxyntomodulin (OXM).⁶⁵ The incretin peptides are associated with metabolic diseases, such as type 2 diabetes and obesity.



Centrifugation conditions

2.0 mL tubes: 1,100 -1,300 g for 10 minutes
8.5 mL tubes: 1,100 -1,300 g for 20 minutes

Further information

Clinical and technical information is available on request.

The BD® P800 Tube is for Research Use Only (RUO). Not for use in diagnostic procedures.



Stability

The table demonstrates the stability of the peptides as a half-life indicator, measured in hours at room temperature, in BD® P800 Tubes, compared to BD Vacutainer® EDTA Tubes:⁶⁵

Peptide	T ½ EDTA plasma (h) at rt*	T ½ BD® P800 plasma (h) at rt*	T ½ BD® P800 whole blood (h)
GLP-1 (7-36A)	4-24	> 96	10±0.5h at rt*, 37-96h on ice
GLP-1 (7-37)	4-18	> 96	12±1h at rt*, 41-5h on ice
GIP (1-42)	5-20	> 96	n.d
OXM	< 24	> 72	n.d
Glucagon	5-20	45	n.d

* Stable for up to 12 hours +/- 3 hours when EDTA Tube is on ice.

BD® P800 Tubes

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Separator	Material	Label	Cap closure	Cap colour
366420	2.0	13 x 75	K ₂ EDTA/Protease, esterase and DPP-IV inhibitor	None	PET	Paper	BD Hemogard™	
366421	8.5	16 x 100	K ₂ EDTA/Protease, esterase and DPP-IV inhibitor	None	PET	Paper	BD Hemogard™	

All tubes are supplied in cases of 100

Available to buy online at www.bdbiosciences.com - search P800

Immediate stabilisation during blood collection

Capillary blood sampling

BD Microtainer® Microtube for Automated Process (MAP) Blood Collection Tubes

Process optimisation for capillary blood samples

BD Microtainer® MAP Tubes are for collection, transport and processing of capillary blood from infants, children, geriatrics and emergency patients, whenever only the smallest amounts of blood are required.

The BD Microtainer® MAP Tube for automated processing enables efficient workflow, both on the ward and in the laboratory.

- A capillary blood tube with standard blood collection tube dimensions (13 x 75 mm) and penetrable closure.
- Compatible with haematology analysers without the need for a tube adapter.
- Three clearly visible fill markings ensure the correct sample volume (250-500 µl).
- A standard label can be attached directly to the sample, minimising the risk of misidentification due to missing or incomplete labelling.




- Easy to open with twist-locking mechanism that ensures no leakage.
- Colour marking for identification of the type of sample and the correct positioning of the patient label.

Further information

Technical information is available on request.

BD Microtainer® MAP Tube

Cat. no.	Description	Closure	Cap colour	Box/Case
363705	K ₂ EDTA tube for haematology with full size blood collection tube, dimensions 13 x 75 mm	BD Microgard™		50/200

Automated
processing
enables efficient
workflow

Capillary blood sampling

BD Microtainer® Tubes

BD Microtainer®

BD Microtainer® Tubes are for collection, transport and processing of capillary blood from infants, children, geriatrics and emergency patients, whenever only the smallest amounts of blood are required.

In order to ensure tube identification, the tubes are marked with the colour code that corresponds to the venous blood collection tubes. There are fill marks on the tubes that ensure the correct blood to additive ratio.

BD Microgard™ Closure

The special design of the BD Microgard™ safety closure substantially reduces blood splashing after the tube has been opened.

A larger diameter facilitates tube handling.









In combination with a tube extender, the BD Microtainer® Tubes with BD Microgard™ closure fit into 13 x 75 mm racks.



Further information

Technical information is available on request.

BD Microtainer® Tubes with Microgard™ closure

Cat. no.	Description	Fill volume	Closure	Cap colour	Box/Case
365975	K ₂ EDTA tube for haematology	250-500 µl	BD Microgard™		50/200
365966	Plasma tube with lithium heparin	200-400 µl	BD Microgard™		50/200
365986	Plasma tube with separating gel and lithium heparin	400-600 µl	BD Microgard™		50/200
365988	Plasma tube with separating gel, lithium heparin and UV protection (amber tint for light-sensitive tests like bilirubin)	250-500 µl	BD Microgard™		50/200
365993	Glucose tube with sodium fluoride and Na ₂ EDTA	400-600 µl	BD Microgard™		50/200
365968	Serum tube with separating gel and clot activator	400-600 µl	BD Microgard™		50/200
365979	Serum tube with separating gel and clot activator, with UV protection (amber tint for light-sensitive tests like bilirubin)	400-600 µl	BD Microgard™		50/200
365964	Serum tube without clot activator	250-500 µl	BD Microgard™		50/200
368933	BD Microtainer® Tube extender for attachment to all BD Microtainer® Tubes with BD Microgard™ closure (10 mm diameter)	n/a	n/a		n/a

Capillary blood sampling

Safety lancets

Capillary blood sampling with BD Microtainer® Contact-Activated Lancet

The ergonomic design of the single-use BD Microtainer® Contact-Activated safety Lancet enables it to be held securely and to locate the sampling point precisely. The lancet has been clinically demonstrated to minimise patient discomfort and maximise blood flow.^{66,68}

Its intuitive handling requires minimum training. The lancet is activated by being pressed onto the sampling location, minimising the influence of the user on puncture depth. The sharp point then retracts automatically into the housing.




This lancet is available in three sizes: for a single drop of blood, medium or large blood flow.



Further information

Clinical and technical information is available on request.

BD Microtainer® Contact-Activated Lancets

Cat. no.	Piercing width and depth	Lancet Type	Blood volume	Colour code	Box/Case
366592	30 G x 1.5 mm	Needle	One drop		200/2,000
366593	21 G x 1.8 mm	Needle	Medium blood flow		200/2,000
366594	1.5 mm x 2.0 mm	Blade	Large blood flow		200/2,000

Capillary blood sampling



Safety lancets

BD Sentry™ Safety Lancet

A single-use safety lancet, available in two sizes. The lancet has an automatic needle retraction to protect healthcare workers from needlestick injuries and prevents re-use. It is designed with a V-shaped finger placement collar, natural-fit thumb pad and anti-slip ridges for more confident handling.



BD Sentry™ Safety Lancets

Cat. no.	Piercing width and depth	Lancet Type	Blood volume	Colour code	Box/Case
369528	28 G x 1.5 mm	Needle	One drop		100/2,000
369523	23 G x 1.8 mm	Needle	Medium blood flow		100/2,000



Capillary blood sampling

Safety lancets

Capillary blood sampling with BD Microtainer® Quikheel™ Lancet

The BD Microtainer® Quikheel™ Lancet is a single-use, safety lancet designed for taking capillary blood samples from the heels of premature, new-born babies and infants. When the button is pressed, an extra-thin steel blade provides a fine, clean, surgical cut and ensures a good flow of blood. The penetration depth is pre-determined to protect against bone infections and cannot be altered. The permanently shielded blade excludes the possibility of injury or reuse.



The ergonomic design enables it to be held securely and the piercing point located precisely. The lancets are sterile and individually packed in blister packaging.



Further information

Technical information is available on request.

BD Microtainer® Quikheel™ Lancets

Cat. no.	Description	Piercing depth	Piercing width	Lancet Type	Colour code	Box/Case
368102	Incision lancet for premature babies	0.85 mm	1.75 mm	Blade		50/200
368103	Incision lancet for newborn babies and infants	1.00 mm	2.50 mm	Blade		50/200



Blood collection devices and accessories

Safety blood collection sets

BD Vacutainer® UltraTouch™ Push Button Blood Collection Set

The BD Vacutainer® UltraTouch™ Push Button Blood Collection Set employs patented PentaPoint™ comfort 5-bevel needle technology. Studies have shown that this design helps reduce the chance of a painful injection by creating a flatter, thinner surface to help penetrate the skin with significantly greater ease.⁶⁸ This new safety device has been shown to reduce penetration forces by up to 32% when compared to another leading blood collection set.⁸

In addition, its exclusive BD RightGauge™, Ultra-Thin wall technology allows for better blood flow due to the needle's larger inner diameter. Therefore, clinicians can select a smaller gauge needle without sacrificing sample quality.

This technology can also improve tube fill time by up to 50% when using the same gauge (a standard 23-G needle vs the BD Vacutainer® UltraTouch™ Push Button Blood Collection Set).⁶⁹

The BD Vacutainer® UltraTouch™ Push Button Blood Collection Set brings healthcare workers greater confidence and the ability to know they can use the needle gauge that is most appropriate for their patients, with improved efficiency.

Further information

BD recommends for all needles without a pre-attached holder that a BD Vacutainer® One-Use Holder is used.

Clinical and technical information is available on request.

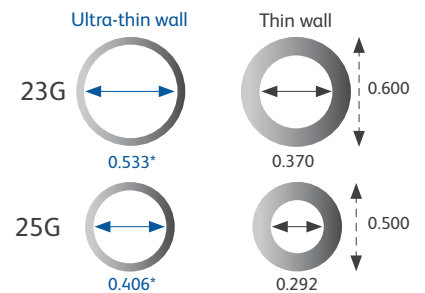


Comfort



PentaPoint™ needle tip

Speed



*These are nominal ID values. All measurements are in mm.

The experience

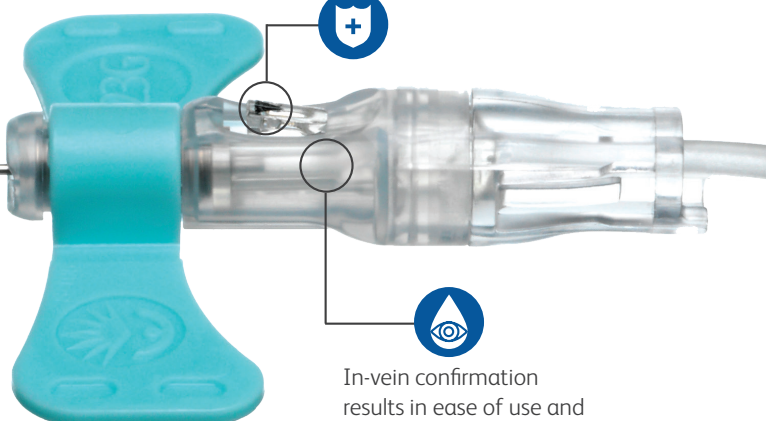
Less pain compared to traditional blood collection sets⁸



Improving difficult venous access⁷



Faster fill time compared to traditional blood collection sets⁶⁹



Reduce needlestick injury¹⁹



In-vein confirmation results in ease of use and confidence during venous blood collection

Blood collection devices and accessories

Safety blood collection sets

BD Vacutainer® UltraTouch™ Push Button Blood Collection Sets

Cat. no.	Size	Needle length	Length of tubing	With Luer adapter	Colour code	Box/Case
367393	21 G (0.8 mm)	19 mm	178 mm	Yes		50/200
367365	21 G (0.8 mm)	19 mm	305 mm	Yes		50/200
367392	23 G (0.6 mm)	19 mm	178 mm	Yes		50/200
367364	23 G (0.6 mm)	19 mm	305 mm	Yes		50/200
367391	25 G (0.5 mm)	19 mm	178 mm	Yes		50/200
367363	25 G (0.5 mm)	19 mm	305 mm	Yes		50/200

BD Vacutainer® UltraTouch™ Push Button Blood Collection Set with Pre-Attached Holder

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

This sterile closed system is ideally suited for taking of samples using the BD BACTEC™ Blood Culture Bottle, with bench-testing indicating improved fill rate.¹⁰



BD Vacutainer® UltraTouch™ Push Button Blood Collection Sets with Pre-Attached Holder

Cat. no.	Size	Needle length	Length of tubing	Colour code	Box/Case
368686	21 G (0.8 mm)	19 mm	178 mm		20/100
368689	21 G (0.8 mm)	19 mm	305 mm		20/100
368685	23 G (0.6 mm)	19 mm	178 mm		20/100
368688	23 G (0.6 mm)	19 mm	305 mm		20/100
368684	25 G (0.5 mm)	19 mm	178 mm		20/100
368687	25 G (0.5 mm)	19 mm	305 mm		20/100

Blood collection devices and accessories

Safety blood collection sets

BD Vacutainer® Push Button Blood Collection Set

The BD Vacutainer® Push Button Blood Collection Set with in-vein activation offers split-second protection against needlestick injuries.

- Indication of successful venepuncture:
When the vein has been successfully penetrated, blood flows immediately into the inspection chamber.⁷⁰
- Versatile:
For taking blood samples and for short-term infusions of up to 2 hours.
- Single-handed activation possible:
Activating the safety mechanism with one hand allows you to focus more attention on the patient and the venepuncture site.
- Protection against needlestick injuries:
When pressing the button, the needle is withdrawn straight from the vein and disappears permanently inside the housing of the blood collection set. This provides an extremely high level of protection⁷⁰.












Further information

BD recommends for all needles without a pre-attached holder that a BD Vacutainer® One-Use Holder is used.

Clinical and technical information is available on request.

BD Vacutainer® Push Button Blood Collection Sets

Cat. no.	Size	Needle length	Length of tubing	With Luer adapter	Colour code	Box/Case
367338	21 G (0.8 mm)	19 mm	178 mm	Yes		50/200
367344	21 G (0.8 mm)	19 mm	305 mm	Yes		50/200
367326	21 G (0.8 mm)	19 mm	305 mm	No		50/200
367336	23 G (0.6 mm)	19 mm	178 mm	Yes		50/200
367342	23 G (0.6 mm)	19 mm	305 mm	Yes		50/200
367324	23 G (0.6 mm)	19 mm	305 mm	No		50/200
367335	25 G (0.5 mm)	19 mm	178 mm	Yes		50/200
367341	25 G (0.5 mm)	19 mm	305 mm	Yes		50/200
367323	25 G (0.5 mm)	19 mm	305 mm	No		50/200

Blood collection devices and accessories

Safety blood collection sets

BD Vacutainer® Push Button Blood Collection Set with Pre-Attached Holder

With this Safety Blood Collection Set, the holder is already pre-attached, so it is not necessary to manually assemble the needle and holder. This ready-for-use blood collection set is individually packaged in a sterile blister.





This sterile closed system is ideally suited for taking of samples using the BD BACTEC™ Blood Culture Bottles.

Further Information

Technical information is available on request.



BD Vacutainer® Push Button Blood Collection Sets with Pre-Attached Holder

Cat. no.	Size	Needle length	Length of tubing	Colour code	Box/Case
367355	21 G (0.8 mm)	19 mm	178 mm		20/100
368657	21 G (0.8 mm)	19 mm	305 mm		20/100
367354	23 G (0.6 mm)	19 mm	178 mm		20/100
368658	23 G (0.6 mm)	19 mm	305 mm		20/100

**Ready-
for-use**

blood
collection set

Blood collection devices and accessories

Safety blood collection sets

BD Vacutainer® Safety-Lok™ Blood Collection Set

The BD Vacutainer® Safety-Lok™ Blood Collection Set for venous blood collection has a fully integrated safety shield, which once activated, protects against needlestick injuries.

- Indication of successful venepuncture:
When the vein has been successfully penetrated, blood can be seen in the device.
- Versatile:
For taking blood samples and for short-term infusions of up to 2 hours.
- Single-handed activation possible:
Activating the safety mechanism with one hand allows you to focus more attention on the patient and the venepuncture site.
- Protection against needlestick injuries:
Following successful venepuncture, the integrated safety shield is pushed over the needle, covering it completely, indicated by an audible click.









Further information

BD recommends for all needles without a pre-attached holder that a BD Vacutainer® One-Use Holder is used.

Clinical and technical information is available on request.

BD Vacutainer® Safety-Lok™ Blood Collection Sets

Cat. no.	Size	Needle length	Length of tubing	With Luer adapter	Colour code	Box/Case
367282	21 G (0.8 mm)	19 mm	178 mm	Yes		50/200
367286	21 G (0.8 mm)	19 mm	305 mm	Yes		50/200
367246	21 G (0.8 mm)	19 mm	305 mm	No		50/200
367284	23 G (0.6 mm)	19 mm	178 mm	Yes		50/200
367288	23 G (0.6 mm)	19 mm	305 mm	Yes		50/200
367247	23 G (0.6 mm)	19 mm	305 mm	No		50/200
367295	25 G (0.5 mm)	19 mm	178 mm	Yes		50/200
368383	25 G (0.5 mm)	19 mm	305 mm	No		50/200

Blood collection devices and accessories

Safety blood collection sets

BD Vacutainer® Safety-Lok™ Blood Collection Set with Pre-Attached Holder

With this Safety Blood Collection Set, the holder is already pre-attached, so it is not necessary to manually assemble the needle and holder. This ready-for-use blood collection set is individually packaged in a sterile blister.

The sterile closed system is ideally suited for the taking of samples using BD BACTEC™ Blood Culture Bottles.

Further information

Technical information is available on request.



BD Vacutainer® Safety-Lok™ Blood Collection Sets with Pre-Attached Holder

Cat. no.	Size	Needle length	Length of tubing	Colour code	Box/Case
368654	21 G (0.8 mm)	19 mm	178 mm	Green	25/200
368652	21 G (0.8 mm)	19 mm	305 mm	Green	25/200
368655	23 G (0.6 mm)	19 mm	178 mm	Blue	25/200
368653	23 G (0.6 mm)	19 mm	305 mm	Blue	25/200



Blood collection devices and accessories

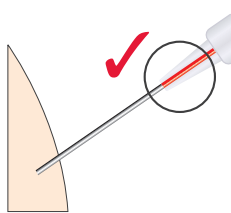
Safety blood collection needles

BD Vacutainer® Eclipse™ Signal™ Blood Collection Needle with integrated holder

The BD Vacutainer® Eclipse™ Signal™ Needle offers a combination of proven, robust safety technology with the additional benefit of in-vein confirmation built into an integrated ergonomic holder. This results in ease of use and confidence during venous blood collection, aiming to increase both healthcare worker and patient safety.

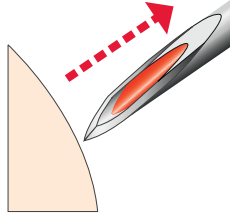


Confirmation



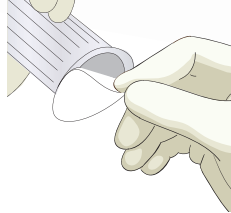
BD InstaFlash™ Needle Technology instantly signals vein entry, to support improved first stick proficiency

Reduced risk



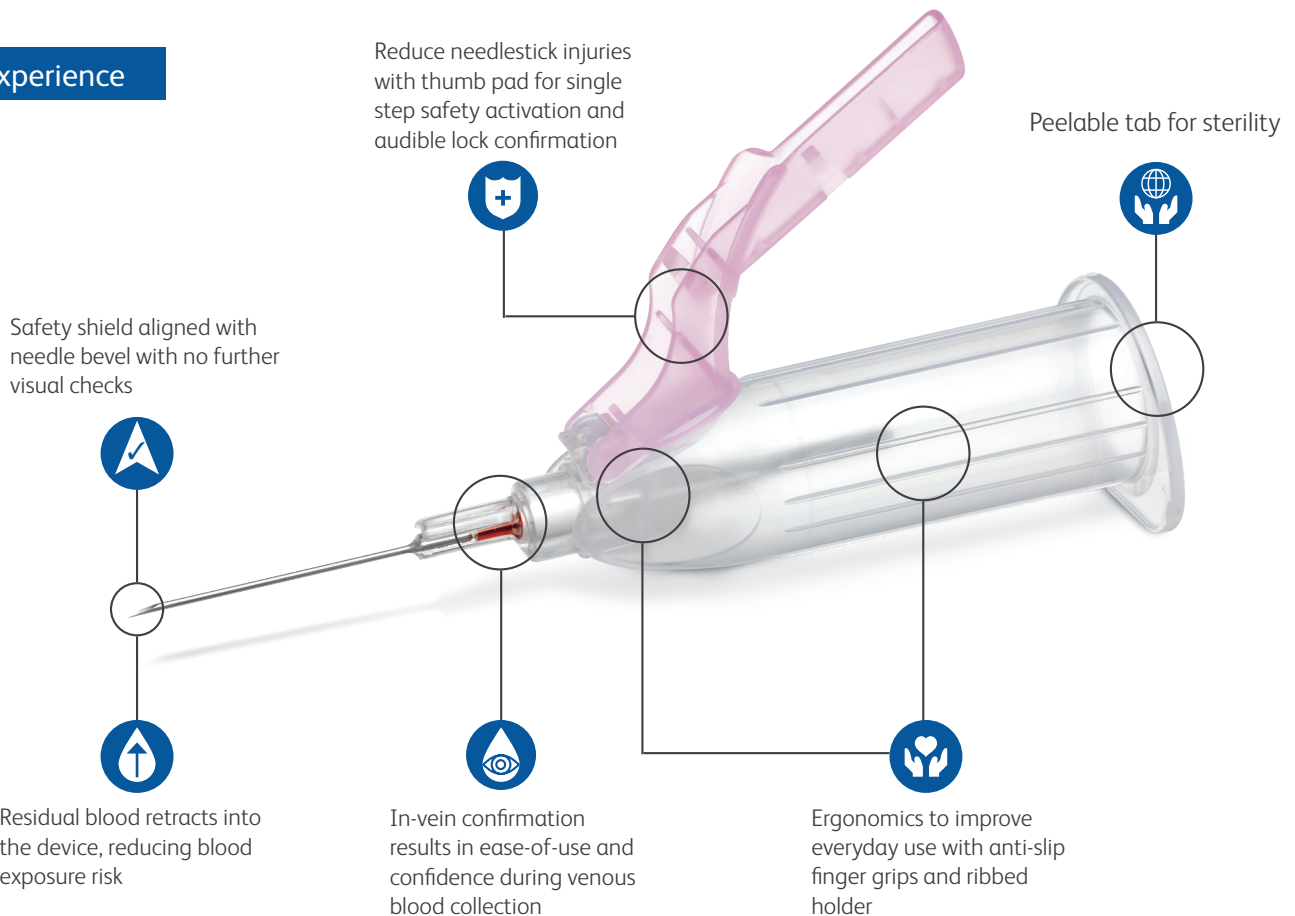
Blood droplet reduction technology draws blood away from the end of the needle

Minimal waste



A peelable tab maintains sterility while reducing packaging waste



Experience



Blood collection devices and accessories

Safety blood collection needles

BD Vacutainer® Eclipse™ Signal™ Blood Collection Needles with Integrated Holder

Cat. no.	Size	Needle length	Colour code	Box/Case
368835	21 G (0.8 mm)	25 mm		50/400
368836	22 G (0.7 mm)	25 mm		50/400



BD Vacutainer® Eclipse™ Signal™ Blood Collection Needles

Further information

BD recommends for all needles without a pre-attached holder that a BD Vacutainer® One-Use Holder is used.

Clinical and technical information is available on request.



Cat. no.	Size	Needle length	Colour code	Box/Case
368837	21 G (0.8 mm)	25 mm		50/500
368838	22 G (0.7 mm)	25 mm		50/500

Blood collection devices and accessories

Safety blood collection needles

BD Vacutainer® Eclipse™ Blood Collection Needle

The BD Vacutainer® Eclipse™ safety needle for venous blood sampling has a fully integrated safety shield, which once activated, protects against needlestick injuries. This safety shield is an integral part of the needle and its orientation aligns with the needle bevel. The safety mechanism is designed for single-handed activation. The fully integrated safety shield engages over the needle with an audible click, irreversibly locking with a triple closure mechanism.



Further information

BD recommends for all needles without a pre-attached holder that a BD Vacutainer® One-Use Holder is used.

Clinical and technical information is available on request.



BD Vacutainer® Eclipse™ Blood Collection Needles



Cat. no.	Size	Needle length	Colour code	Box/Case
368609	21 G (0.8 mm)	32 mm		48/480
368610	22 G (0.7 mm)	32 mm		48/480

BD Vacutainer® Eclipse™ Blood Collection Needle with Pre-Attached Holder

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.



BD Vacutainer® Eclipse™ Blood Collection Needles with Pre-Attached Holder

Cat. no.	Size	Needle length	Colour code	Box
368650	21 G (0.8 mm)	32 mm		100
368651	22 G (0.7 mm)	32 mm		100

Blood collection devices and accessories

Blood collection needles

BD Vacutainer® Multi-Sample Needles

BD Vacutainer® needles can be used for multiple tube samples. BD Vacutainer® needles are coated with silicone, a low friction lubricant, ensuring smooth vein entry.

BD Vacutainer® needles are available in 20, 21 or 22 gauge needle sizes.







Further information

BD recommends for all needles without a pre-attached holder that a BD Vacutainer® One-Use Holder is used.

Clinical and technical information is available on request.





BD Vacutainer® Multi-Sample Needles

Cat. no.	Size	Needle length	Colour code	Box/Case
360215	20 G (0.9 mm)	38 mm		100/1,000
360214	20 G (0.9 mm)	25 mm		100/1,000
360213	21 G (0.8 mm)	38 mm		100/1,000
360212	21 G (0.8 mm)	25 mm		100/1,000
360211	22 G (0.7 mm)	38 mm		100/1,000
360210	22 G (0.7 mm)	25 mm		100/1,000

BD Vacutainer® Flashback Blood Collection Needles

The BD Vacutainer® Flashback Needle is built with the same quality as the multi-sample needle and includes in-vein confirmation.

Cat. no.	Size	Needle length	Colour code	Box/Case
301746	21 G (0.8 mm)	25 mm		50/1,000
301747	22 G (0.7 mm)	25 mm		50/1,000

Blood collection devices and accessories

Adapters and holders

BD Vacutainer® One-Use Holder, BD Luer Adapters and Adapters with Pre-Attached Holders



- 1 The BD Vacutainer® Blood Transfer Device is a pre-assembled and easy-to-use device, designed with safety in mind. It is used for needle-less specimen transfer from a syringe to an evacuated tube or blood culture bottle and has a red colour-coded connection to provide easy differentiation from other holder-based products.
- 2 The BD Vacutainer® Luer-Lok™ Access Device is a pre-assembled multi-sample BD Luer-Lok™, compatible with female luer connections. It has a blue colour-coded connection to provide easy differentiation from other holder-based products.
- 3 The BD Vacutainer® One-Use Holder is compatible with all BD Vacutainer® Tubes and Needles. The BD Vacutainer® One-Use Holder is also compatible with the BD BACTEC™ Blood Culture Bottle.




- 4 The BD Vacutainer® Luer Adapter is a sterile device to be used with the BD Vacutainer® One-Use Holder. It is compatible with female luer connections, with a blue colour-coded cap to provide differentiation from other needles.

BD Vacutainer® Luer Adapters with Pre-Attached Holders


These single-use products are ready-to-use, sterile, packed individually with a unique GS1 DataMatrix 2D bar code device identifier, in a strip of six units.

Cat. no.	Description	Colour code	Case
36481000	Blood Transfer Device (female luer)		198
36490200	Luer-Lok™ Access Device (male luer)		198

BD Vacutainer® One-Use Holder

Cat. no.	Description	Colour code	Box/Case
364815	BD Vacutainer® One-Use Holder is made of plastic and is designed to be part of the BD Vacutainer® System, compatible with tubes of 13 mm and 16 mm diameter and BD BACTEC™ Blood Culture Bottle, transparent white		250/1,000

BD Vacutainer® Luer Adapter

Cat. no.	Description	Colour code	Case
367300	BD Vacutainer® Luer Adapter		100/1,000

Blood collection devices and accessories

Stretch tourniquets

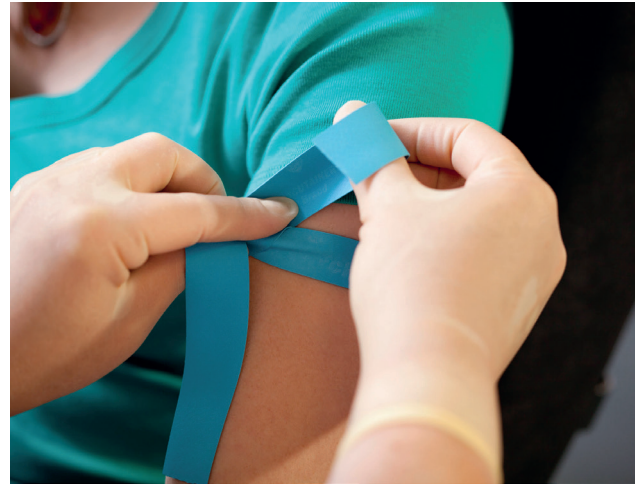
BD Vacutainer® Stretch Tourniquet

The BD Vacutainer® Stretch Tourniquet is latex-free and scent-free. Using a single-use tourniquet minimises the risk of infection to healthcare workers and patients.²⁷

The BD Vacutainer® Stretch Tourniquet is packaged in an easy-to-use dispenser which is also convenient for storage.

Additional features include:

- Textured thermoplastic elastomer provides a better grip.
- High visibility colours to increase contrast and minimise the chances of tourniquets being left on the patient arm or being incorrectly disposed of.



BD Vacutainer® Stretch Tourniquets

Cat. no.	Description	Colour	Box/Case
367198	25 textured single-use, latex-free tourniquets in one packaging unit, perforated for separation.	Blue	25/500
367209	25 textured single-use, latex-free tourniquets in one packaging unit, perforated for separation.	Orange	25/500

BD Critical Care Collection Syringes

Arterial blood collection syringes

BD Critical Care Collection Syringes can be used to collect blood from a patient's artery. All syringes contain spray-dried calcium-balanced lithium heparin that enables the specimen to be analysed for Arterial Blood Gases (ABGs) and a host of critical care analytes.

BD A-Line™ Blood Collection Syringes

BD A-Line™ syringes are used for blood collection by manual aspiration and are supplied without needles. They are designed to be used for arterial blood collection from an arterial line, and are available in 1mL and 3mL slip tip and 3mL BD Luer-Lok™ syringes.

Further information

Clinical and technical information is available on request.

BD A-line™ Blood Collection Syringes: Manual Aspirated Fill

Cat. no.	Syringe volume (mL)	Recommended fill volume (mL)	Units of heparin* (IU) (per syringe/per mL of blood**)	Gauge	Needle length	Connection	Tip cap
364356	1.0	0.6	30/50	-	-	Slip tip	Conventional
364376	3.0	1.6	80/50	-	-	Slip tip	Conventional
364378	3.0	1.6	80/50	-	-	BD Luer-Lok™	BD Hemogard™

Syringes supplied in cases of 100



BD Critical Care Collection Syringes

BD Preset™ Arterial Blood Collection Syringes

BD Preset™ Eclipse™ Arterial Blood Collection Syringes

BD Critical Care Collection Syringes are available with the BD Eclipse™ safety-engineered needle, offering enhanced safety for the healthcare worker. The safety shield is integrated and is not an accessory to the needle. The needle bevel and safety shield are in alignment, ensuring no extra manipulation. The single-handed technique ensures no change in the collection technique and the double-locking mechanism is both visually and audibly confirmed for the healthcare worker.



Further information

Clinical and technical information is available on request.

BD Preset™ Eclipse™ Arterial Blood Collection Syringes: Self-Aspiration Fill

Cat. no.	Syringe volume (mL)	Recommended fill volume (mL)	Units of heparin* (IU) (per syringe/per mL of blood**)	Gauge	Needle length	Connection	Tip cap
364390	3.0	1.6	80/50	22G (0.7 mm) BD Eclipse™	1" (25 mm)	BD Luer-Lok™	BD Hemogard™
364389	3.0	1.6	80/50	22 G (0.7 mm) BD Eclipse™	1.25" (32mm)	BD Luer-Lok™	BD Hemogard™
364391	3.0	1.6	80/50	23 G (0.6 mm) BD Eclipse™	1" (25 mm)	BD Luer-Lok™	BD Hemogard™
364393	3.0	1.6	80/50	25 G (0.5 mm) BD Eclipse™	1" (25 mm)	BD Luer-Lok™	BD Hemogard™

Syringes supplied in cases of 100

BD Preset™ Blood Collection Syringes

The BD Preset™ syringe plunger can be preset to the recommended volume. As arterial blood fills the syringe, the residual air is expelled through the self-venting membrane.

BD Preset™ Blood Collection Syringes: Self-Aspirated Fill

Cat. no.	Syringe volume (mL)	Recommended fill volume (mL)	Units of heparin* (IU) (per syringe/per mL of blood**)	Gauge	Needle length	Connection	Tip cap
364416	1.0	0.6	30/50	-	-	Slip tip	Conventional
364316	3.0	1.6	80/50	-	-	BD Luer-Lok™	BD Hemogard™
364413	1.0	0.6	30/50	23 G (0.6 mm)	1" (25 mm)	Slip tip	Conventional
364415	1.0	0.6	30/50	25 G (0.5 mm)	5/8" (16 mm)	Slip tip	Conventional
364314	3.0	1.6	80/50	22 G (0.8 mm)	1" (25 mm)	BD Luer-Lok™	BD Hemogard™
364327	3.0	1.6	80/50	23 G (0.5 mm)	1" (25 mm)	BD Luer-Lok™	BD Hemogard™

Syringes supplied in cases of 100

* Spray-dried, calcium-balanced lithium heparin

**At recommended fill volume

Urine collection products

BD Vacutainer® Urine Collection System

The BD Vacutainer® Urine Collection System is a closed system offering a range of solutions for collection, transport and preservation of urine samples.




BD offers a wide range of tube volumes for microbiology and urinalysis determinations, with or without preservatives. For microbiology determinations, BD offers a range of tube types with boric acid-based preservatives, that can maintain the bacterial population in the urine specimen for up to 48-hours at room temperature.

BD collection devices include specimen cup, 24-hour 3 L container and transfer straw for all patient collection methods.

Once the sample has been collected, the BD Vacutainer® evacuated urine tubes can be transported safely to the laboratory for analysis.



BD Vacutainer® Urine Tubes for Urinalysis

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Material	Label	Cap closure	Cap colour	Box/Case
368500	4.0	13 x 75	Without additive	PET	Paper	BD Hemogard™		100/1,000
368501	6.0	13 x 100	Without additive	PET	Paper	BD Hemogard™		100/1,000
365000*	9.5	16 x 100*	Without additive	PET	Paper	BD Hemogard™		100/1,000
364915	11.0	16 x 100	Without additive	PET	Paper	BD Hemogard™		100/1,000
364917	11.0	16 x 100	Without additive	PET	Paper	BD Hemogard™		100/1,000
364938	10.0	16 x 100	Without additive	PET	Paper	Conventional		100/1,000

* With conical bottom



Urine collection products

BD Vacutainer® Urine Tubes for Urinalysis with additives



Depending on the analytes of interest, the preservative allows for transport, testing and storage of the specimen up to 72 hours at room temperature

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Material	Label	Cap closure	Cap colour	Box/case
365017	8.0	16 x100	Mercury-free stabiliser*	PET	Paper	BD Hemogard™		100/1,000
364992	8.0	16 x100***	Mercury-free stabiliser*	PET	Paper	Conventional		100/1,000

BD Vacutainer® Urine Tubes for Microbiology

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Material	Label	Cap closure	Cap colour	Box/case
364958	4.0	13 x 75	Stabiliser**	PET	Paper	BD Hemogard™		100/1,000
364955	10.0	16 x 100	Stabiliser**	PET	Paper	BD Hemogard™		100/1,000

BD Vacutainer® Urine Kits for Microbiology (Tube and Transfer Straw)

Cat. no.	Draw volume (mL)	Size (mm)	Additive	Material	Label	Cap closure	Cap colour	Box/case
364959	4.0	13 x 75	Stabiliser**	PET	Paper	BD Hemogard™		50/1,000
364944	10.0	16 x 100	Stabiliser**	PET	Paper	BD Hemogard™		50/1,000

* With mercury-free stabiliser (chlorhexidine, ethyl paraben, sodium propionate) for urine chemistry, up to 72 hours stabilisation of clinical chemistry at room temperature. Ideal for processing in laboratory automation and with urine test strips. Suitable for sediment analysis. Regardless of the additive in the urine tube, BD recommends that the urine sediment determination for erythrocytes, leukocytes and urinary casts be carried out immediately upon arrival at the laboratory. Not suitable for microbiological investigations.

** Stabiliser for microbiological investigations consisting of boric acid, sodium formate and sodium borate, up to 48-hour stabilisation of bacterial growth at room temperature.

*** With conical bottom

Urine collection products

BD Vacutainer® Urine Collection Containers and Transfer Units

Cat. no.	Description	Pack/case
364941	Polypropylene urine cup with screw closure and integrated transfer device, 120-mL capacity, sterile	100/200
364984	24Hr 3L urine container with integrated transfer device and long cannula	30
364940	Specimen transfer straw, non-sterile	100/1,000
36490200	BD Luer-Lok™ Access Device (male luer)	198

The BD Luer-Lok™ Access Device enables transfer of a urine sample directly from a foley catheter to the tube. It enables fewer sample collection steps, less manipulation and reduced risk of contamination.⁷¹

Further information

Clinical and technical information is available on request.



BD Vacutainer® Blood Collection Tubes

Reliability of the effects of anticoagulants, stabilisers and additives

Anticoagulants, stabilisers and additives

BD Vacutainer® Blood Collection Tubes come with different anticoagulants, stabilisers and additives depending on the type of diagnostic test required.

Anticoagulants

To keep blood samples from coagulating between collection and analysis, BD Vacutainer® Blood Collection Tubes contain liquid or spray-dried anticoagulants that include: lithium heparin, sodium heparin, EDTA, sodium citrate and potassium oxalate.

Stabilisers

Sodium fluoride stabilises glucose and lactate in whole blood by inhibiting glycolysis. Tubes with a gel barrier ensure sample stability by keeping corpuscular blood components separate from serum or plasma. For superior separation performance, mechanical separators allow blood cells to flow to the lower part of BD Vacutainer® Blood Collection Tubes and form a complete barrier at the end of centrifugation.

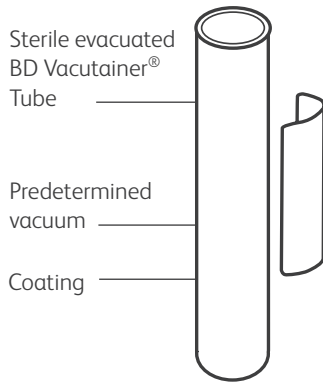
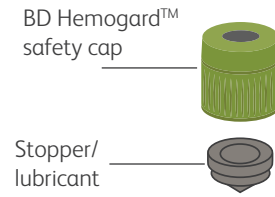
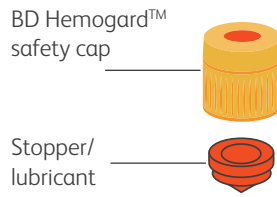
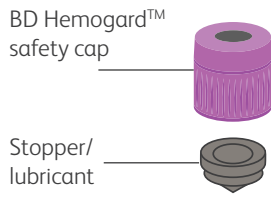
Additives

High-purity silica particles are added to some kinds of plastic blood collection tubes to trigger coagulation within an acceptable amount of time, so that you can obtain serum without altering the sample.

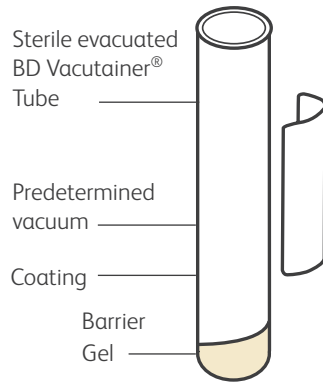


BD Vacutainer® Blood Collection Tubes

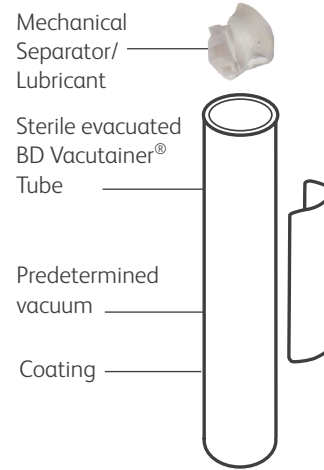
Tube build up



e.g. EDTA



e.g. BD SST™ II Advance



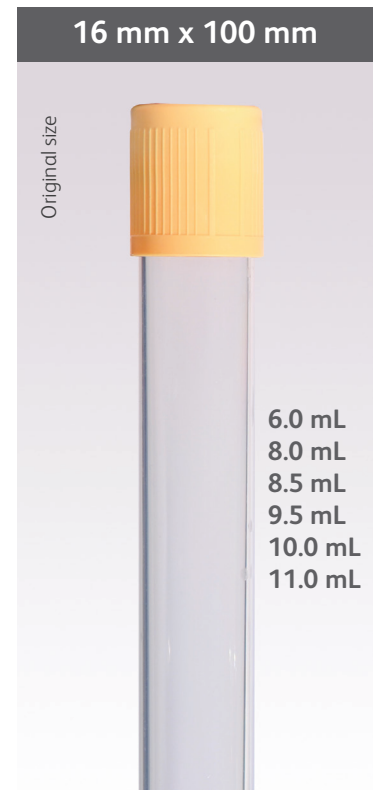
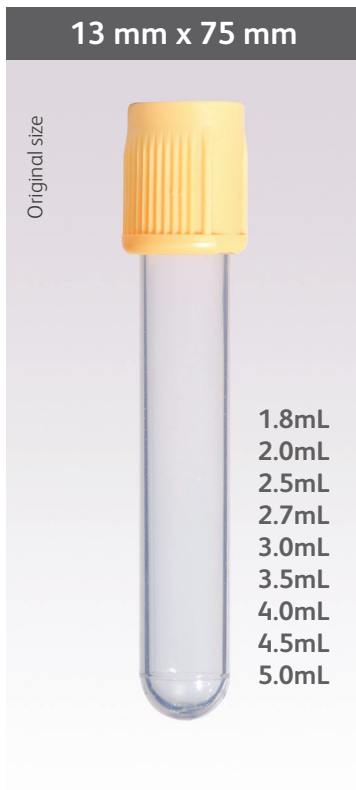
e.g. BD Barricor™

BD Vacutainer® Blood Collection Tubes

Tube dimensions and sample volumes

BD Vacutainer® Tubes are available in three different sizes as pictured below, each with different sample volumes. Tubes for special analysis may have a different size.

The volume given in mL on the tube refers to the amount of blood that will be taken from the patient. For tubes with a fluid additive, the final volume may deviate from this (*i.e.*, amount of blood + additive).



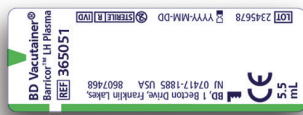
BD Vacutainer® Blood Collection Tubes

Labelling and packaging information

Tube labelling

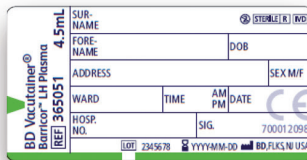


- 1 Fill volume
- 2 Fill marking
- 3 BD catalogue number
- 4 BD Vacutainer® notch label - colour coding and attachment point for secondary label
- 5 Type of tube and additive concentration (if applicable)
- 6 Sterilisation symbol
- 7 Expiry date
- 8 Batch number



Paper label

Patient data can be written directly onto the white surface of the standard label.



Block label

Paper label with form for patient data.



See thru

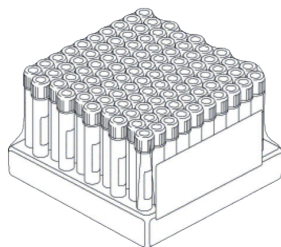
The product specifications are printed directly onto the tube and enable better visual inspection of the tubes.



Transparent label

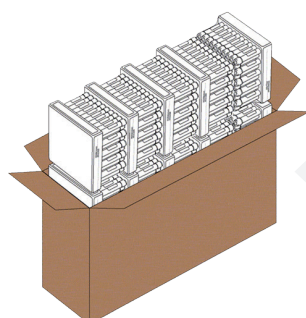
Same format as the paper version but with the added advantage of making it easier to visually inspect the tube.

Shelf



- 1 Type of tube and additive concentration (if applicable)
- 2 Instructions for use as pictograms
- 3 BD catalogue number
- 4 Number of tubes in the box
- 5 Expiry date and batch number
- 6 Applicable symbols
- 7 Country of origin
- 8 Volume and size of the tubes

Case



- 1 Type of tube and additive concentration (if applicable)
- 2 BD catalogue number
- 3 Number of tubes in the case
- 4 Applicable symbols
- 5 Country of origin
- 6 Volume and size of the tubes

Labelling is only for BD Barricor™ example.

Additional information

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Fax: +41 61 485 22 00
www.bd.com/ch
infoch@bd.com

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RG41 5TS
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www.bd.com/uk
bdukvacutainer@bd.com

Additional information

Product CE mark overview

Product Family Name	Cat. No.	CE Number	
BD Preset™ & BD A-Line™	364356	CE	
BD Preset™ & BD A-Line™	364416		
BD Preset™ & BD A-Line™	364316		
BD Preset™ & BD A-Line™	364376		
BD Preset™ & BD A-Line™	364378		
BD Vacutainer® ACD Blood Collection Tubes	367756	CE 0123	
BD Vacutainer® ACD Blood Collection Tubes	366645		
BD Vacutainer® EDTA Aprotinin Blood Collection Tubes	361017		
BD Vacutainer® Barricor™ Blood Collection Tubes	365050		
BD Vacutainer® Barricor™ Blood Collection Tubes	365054		
BD Vacutainer® Barricor™ Blood Collection Tubes	365055		
BD Vacutainer® Barricor™ Blood Collection Tubes	365053		
BD Vacutainer® Barricor™ Blood Collection Tubes	365087		
BD Vacutainer® Barricor™ Blood Collection Tubes	365049		
BD Vacutainer® Barricor™ Blood Collection Tubes	365051		
BD Vacutainer® Barricor™ Blood Collection Tubes	365052		
BD Vacutainer® Barricor™ Blood Collection Tubes	365081		
BD Vacutainer® Barricor™ Blood Collection Tubes	365056		
BD Vacutainer® Barricor™ Blood Collection Tubes	365057		
BD Vacutainer® Serum Blood Collection Tubes	367896		
BD Vacutainer® Serum Blood Collection Tubes	368271		
BD Vacutainer® Serum Blood Collection Tubes	368492		
BD Vacutainer® Serum Blood Collection Tubes	365904		
BD Vacutainer® Serum Blood Collection Tubes	369032		
BD Vacutainer® Serum Blood Collection Tubes	368815		CE
BD Vacutainer® Serum Blood Collection Tubes	368817		
BD Vacutainer® Serum Blood Collection Tubes	367614		
BD Vacutainer® Serum Blood Collection Tubes	367624		
BD Vacutainer® Serum Blood Collection Tubes	367819		
BD Vacutainer® Citrate Blood Collection Tubes	363047		
BD Vacutainer® Citrate Blood Collection Tubes	363093		
BD Vacutainer® Citrate Blood Collection Tubes	363097		
BD Vacutainer® Citrate Blood Collection Tubes	368273		
BD Vacutainer® Citrate Blood Collection Tubes	363048		
BD Vacutainer® Citrate Blood Collection Tubes	363079		
BD Vacutainer® Citrate Blood Collection Tubes	363095		
BD Vacutainer® Citrate Blood Collection Tubes	364305		
BD Vacutainer® CPT™ Cell Preparation Tubes	362781	CE 0123	
BD Vacutainer® CPT™ Cell Preparation Tubes	362780		
BD Vacutainer® CPT™ Cell Preparation Tubes	362782		

Product Family Name	Cat. No.	CE Number
BD Vacutainer® EDTA Blood Collection Tubes	367525	CE
BD Vacutainer® EDTA Blood Collection Tubes	367836	
BD Vacutainer® EDTA Blood Collection Tubes	368274	
BD Vacutainer® EDTA Blood Collection Tubes	368841	
BD Vacutainer® EDTA Blood Collection Tubes	368499	
BD Vacutainer® EDTA Blood Collection Tubes	368856	
BD Vacutainer® EDTA Blood Collection Tubes	368857	
BD Vacutainer® EDTA Blood Collection Tubes	362072	
BD Vacutainer® EDTA Blood Collection Tubes	368270	
BD Vacutainer® EDTA Blood Collection Tubes	368860	
BD Vacutainer® EDTA Blood Collection Tubes	368861	
BD Vacutainer® EDTA Blood Collection Tubes	367862	
BD Vacutainer® EDTA Blood Collection Tubes	365900	
BD Vacutainer® EDTA Blood Collection Tubes	367864	
BD Vacutainer® EST™ Blood Collection Tubes	362725	
BD Vacutainer® Fluoride Blood Collection Tubes	367933	
BD Vacutainer® Fluoride Blood Collection Tubes	368920	
BD Vacutainer® Fluoride Blood Collection Tubes	368921	
BD Vacutainer® Fluoride Blood Collection Tubes	368520	
BD Vacutainer® Fluoride Blood Collection Tubes	368521	
BD Vacutainer® Fluoride Blood Collection Tubes	368201	
BD Vacutainer® Fluoride Blood Collection Tubes	367764	
BD Vacutainer® Heparin Blood Collection Tubes	367526	
BD Vacutainer® Heparin Blood Collection Tubes	368272	
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BD Vacutainer® Heparin Blood Collection Tubes	368480	
BD Microtainer® Blood Collection Tubes	363705	
BD Microtainer® Blood Collection Tubes	365964	
BD Microtainer® Blood Collection Tubes	365966	
BD Microtainer® Blood Collection Tubes	365968	
BD Microtainer® Blood Collection Tubes	365975	
BD Microtainer® Blood Collection Tubes	365979	
BD Microtainer® Blood Collection Tubes	365986	
BD Microtainer® Blood Collection Tubes	365988	
BD Microtainer® Blood Collection Tubes	365993	
BD Microtainer® Blood Collection Tubes	368933	

Additional information

Product CE mark overview

Product Family Name	Cat. No.	CE Number
PAXgene® Blood ccfDNA Tube	768165	CE 0123
PAXgene® Blood DNA Tube	761165	
PAXgene® Blood RNA Tube	762165	
BD Vacutainer® PPT™ Blood Collection Tubes	362791	
BD Vacutainer® PPT™ Blood Collection Tubes	362795	
BD Vacutainer® PPT™ Blood Collection Tubes	362799	
BD Vacutainer® PST™ II Blood Collection Tubes	367374	
BD Vacutainer® PST™ II Blood Collection Tubes	368497	
BD Vacutainer® PST™ II Blood Collection Tubes	366567	
BD Vacutainer® PST™ II Blood Collection Tubes	367376	
BD Vacutainer® PST™ II Blood Collection Tubes	367378	CE
BD Vacutainer® RST Blood Collection Tubes	368774	
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	366882	
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	367957	
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	368498	
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	368965	
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	368879	
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	366566	
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	367955	
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	368968	
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	366444	CE
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	366468	
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	366644	
BD Vacutainer® SST™ and SST™ II Advance Blood Collection Tubes	367953	
BD Vacutainer® Thrombin Blood Collection Tubes	367811	
BD Vacutainer® Thrombin Blood Collection Tubes	367817	
BD Vacutainer® Trace Element Blood Collection Tubes	367735	
BD Vacutainer® Trace Element Blood Collection Tubes	368381	
BD Vacutainer® Trace Element Blood Collection Tubes	368380	
BD Vacutainer® Urine Tubes	364915	
BD Vacutainer® Urine Tubes	364917	CE 2797
BD Vacutainer® Urine Tubes	368501	
BD Vacutainer® Urine Collection Devices	364941	
BD Vacutainer® Urine Tubes	364938	
BD Vacutainer® Urine Collection Devices	364944	
BD Vacutainer® Urine Tubes	364955	

Product Family Name	Cat. No.	CE Number
BD Vacutainer® Urine Tubes	364958	CE 2797
BD Vacutainer® Urine Collection Devices	364959	
BD Vacutainer® Urine Tubes	364992	
BD Vacutainer® Urine Tubes	365017	
BD Vacutainer® Urine Tubes	365000	
BD Vacutainer® Urine Collection Devices	364940	
BD Vacutainer® Urine Collection Devices	364984	
BD Vacutainer® Urine Tubes	368500	
BD Preset™ Arterial Blood Collection Syringe	364314	
BD Preset™ Arterial Blood Collection Syringe	364327	
BD Preset™ Eclipse™ Arterial Blood Collection Syringe	364389	CE 2797
BD Preset™ Eclipse™ Arterial Blood Collection Syringe	364390	
BD Preset™ Eclipse™ Arterial Blood Collection Syringe	364391	
BD Preset™ Eclipse™ Arterial Blood Collection Syringe	364393	
BD Preset™ Arterial Blood Collection Syringe	364413	
BD Preset™ Arterial Blood Collection Syringe	364415	
BD Vacutainer® Blood Transfer Device Holder	3648100	
BD Microtainer® Contact-Activated Lancet	366592	
BD Microtainer® Contact-Activated Lancet	366593	
BD Microtainer® Contact-Activated Lancet	366594	
BD Vacutainer® Eclipse™ Blood Collection Needle	368609	CE 0050
BD Vacutainer® Eclipse™ Blood Collection Needle	368610	
BD Vacutainer® Eclipse™ Blood Collection Needle with Pre-Attached Holder	368650	
BD Vacutainer® Eclipse™ Blood Collection Needle with Pre-Attached Holder	368651	
BD Vacutainer® Eclipse™ Signal™ Blood Collection Needle	368837	
BD Vacutainer® Eclipse™ Signal™ Blood Collection Needle	368838	
BD Vacutainer® Eclipse™ Signal™ Blood Collection Needle with Integrated Holder	368835	
BD Vacutainer® Eclipse™ Signal™ Blood Collection Needle with Integrated Holder	368836	
BD Vacutainer® Flashback Blood Collection Needle	301746	
BD Vacutainer® Flashback Blood Collection Needle	301747	
BD Vacutainer® Luer Adapter	367300	CE 0050
BD Vacutainer® Luer-Lok™ Access Device	36490200	
BD Vacutainer® PrecisionGlide™ Multiple Sample Needle	360210	
BD Vacutainer® PrecisionGlide™ Multiple Sample Needle	360211	
BD Vacutainer® PrecisionGlide™ Multiple Sample Needle	360212	
BD Vacutainer® PrecisionGlide™ Multiple Sample Needle	360213	
BD Vacutainer® PrecisionGlide™ Multiple Sample Needle	360214	
BD Vacutainer® PrecisionGlide™ Multiple Sample Needle	360215	

Additional information

Product CE mark overview

Product Family Name	Cat. No.	CE Number
BD Vacutainer® Push Button Blood Collection Set	367323	CE 0050
BD Vacutainer® Push Button Blood Collection Set	367324	
BD Vacutainer® Push Button Blood Collection Set	367326	
BD Vacutainer® Push Button Blood Collection Set	367335	
BD Vacutainer® Push Button Blood Collection Set	367336	
BD Vacutainer® Push Button Blood Collection Set	367338	
BD Vacutainer® Push Button Blood Collection Set	367341	
BD Vacutainer® Push Button Blood Collection Set	367342	
BD Vacutainer® Push Button Blood Collection Set	367344	
BD Vacutainer® Push Button Blood Collection Set with Pre-Attached Holder	367354	
BD Vacutainer® Push Button Blood Collection Set with Pre-Attached Holder	367355	
BD Vacutainer® Push Button Blood Collection Set with Pre-Attached Holder	368657	
BD Vacutainer® Push Button Blood Collection Set with Pre-Attached Holder	368658	
BD Microtainer® Quikheel™ Lancet	368102	
BD Microtainer® Quikheel™ Lancet	368103	
BD Sentry™ Safety Lancet	369523	
BD Sentry™ Safety Lancet	369528	
BD Vacutainer® Safety-Lok™ Blood Collection Set	367246	CE 0050
BD Vacutainer® Safety-Lok™ Blood Collection Set	367247	
BD Vacutainer® Safety-Lok™ Blood Collection Set	367282	
BD Vacutainer® Safety-Lok™ Blood Collection Set	367284	
BD Vacutainer® Safety-Lok™ Blood Collection Set	367286	
BD Vacutainer® Safety-Lok™ Blood Collection Set	367288	
BD Vacutainer® Safety-Lok™ Blood Collection Set	367295	
BD Vacutainer® Safety-Lok™ Blood Collection Set	368383	
BD Vacutainer® Safety-Lok™ Blood Collection Set with Pre-Attached Holder	368652	
BD Vacutainer® Safety-Lok™ Blood Collection Set with Pre-Attached Holder	368653	
BD Vacutainer® Safety-Lok™ Blood Collection Set with Pre-Attached Holder	368654	
BD Vacutainer® Safety-Lok™ Blood Collection Set with Pre-Attached Holder	368655	
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set	367363	
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set	367364	

Product Family Name	Cat. No.	CE Number
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set	367365	CE 0050
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set	367391	
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set	367392	
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set	367393	
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set with Pre-Attached Holder	368684	
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set with Pre-Attached Holder	368685	
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set with Pre-Attached Holder	368686	
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set with Pre-Attached Holder	368687	
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set with Pre-Attached Holder	368688	
BD Vacutainer® UltraTouch™ Push Button Blood Collection Set with Pre-Attached Holder	368689	
BD Vacutainer® One Use Holder	364815	
BD Vacutainer® Stretch Tourniquet	367198	
BD Vacutainer® Stretch Tourniquet	367209	
BD Bactec™ Plastic Mycosis Ic/F Culture Vials	442017	
BD Bactec™ Plastic Bactec Peds Plus/F	442020	
BD Bactec™ Plastic Lytic/10 Anaerobic/F Culture Vials	442021	
BD Bactec™ Plastic Bactec Plus Anaerobic/F Cultural Vials	442022	
BD Bactec™ Plastic Bactec Plus Aerobic/F Culture Vials	442023	
BD BACTEC™ Standard/10 Aerobic/F Culture Vials	442027	
BD Bactec™ Glass Myco/F Lytic Culture Vials (for Mycobacterial use)	442288	
BD BACTEC™ FX40	442296	

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