

BD Barricor™ yields **Accuracy**

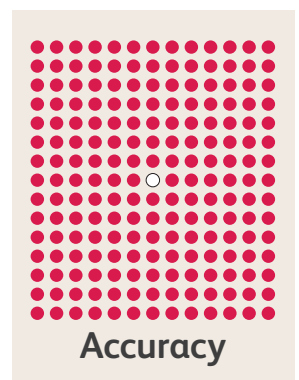
BD Barricor™ is an innovative technology that provides greater confidence in the accuracy of laboratory results across a broad range of analytes enabling clinicians to act on reliable and credible results to deliver cutting edge care and service

Sample stability: Safe and consistent retesting

Sensitive assays: Preservation of therapeutic drugs

Versatility: Accurate results in ED and routine testing

Process impact: Accurate results impact the whole process



BD Barricor™ supports the retesting practice

Stability of key cell sensitive analytes¹

- AST, LDH, K, and Phosphate are sensitive to the cellular interference in the sample.
- The cleaner plasma sample results in longer analyte stability as compared to plasma gel



Analytes	Serum Gel	BD Barricor™ Plasma	Plasma Gel
AST	7 days 4°C	7 days 4°C	2-3 days 4°C
LDH	7 days 4°C	3 days 4°C	2-3 days 4°C
K	7 days 4°C	7 days 4°C	2-3 days 4°C
Phos	7 days 4°C	7 days 4°C	2-3 days 4°C

“Sample stability is defined as the capability of a sample to retain, for a defined period of time, the initial value of a measured quantity within specific limits when stored under defined condit”

Felding et al 1981

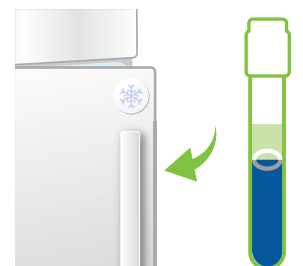
Analyte stability in pathologic conditions²



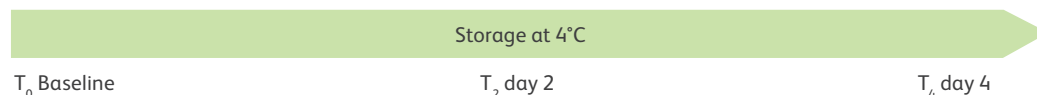
40
internal medicine
patients



66
biochemical analytes
(Roche cobas® 6000, cobas® 8000 and Abbott ARCHITECT)



Storage at 4°C ensures analyte stability up to 4 days.



- Tests took place only on primary tubes, which were stored up to 4 days;
- The bias between results at day 0 and day 4 were calculated;
- Stability acceptance bias was set at 10% bias between day 0 and day 4².



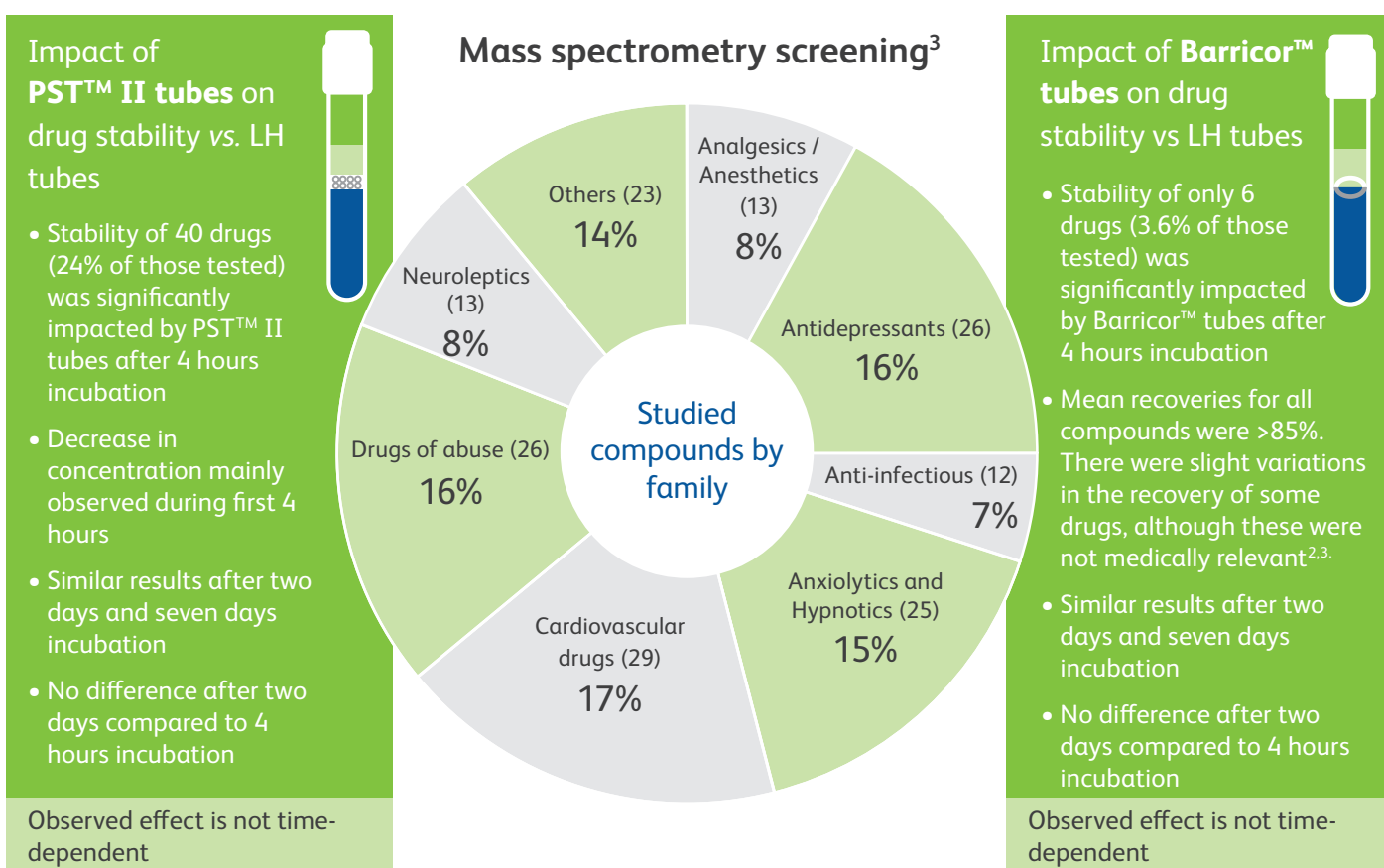
BD Barricor™ delivers accurate TDM results

“Therapeutic drug monitoring (TDM) and mass spectrometry procedures as part of personalized medicine are becoming more and more accessible for most laboratories in hospitals. Now, laboratory or pharmacology have hundreds of therapeutic drugs (TD) or drugs of abuse (DOA) to monitor.”

Dr Fabien Lamoureux

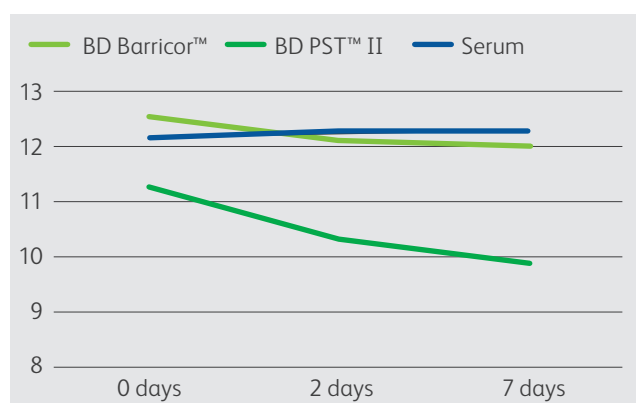
Why TD and DOA stability?

- 1 Patient safety:** therapeutic adjustments are based on laboratory results
- 2 ISO 15189:** the accreditation standards require control over sample stability

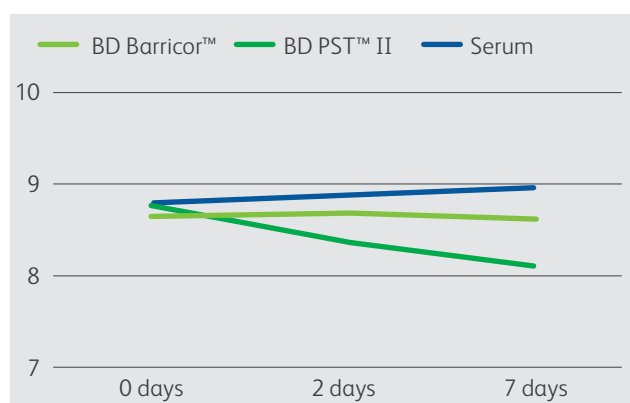


BD Barricor™ preserves therapeutic drugs to produce stable and reliable results on conventional analytic platforms.⁴

Siemens Dimension Vista® Phenytoin (µg/mL)



Siemens Dimension Vista® Carbamazepine (µg/mL)



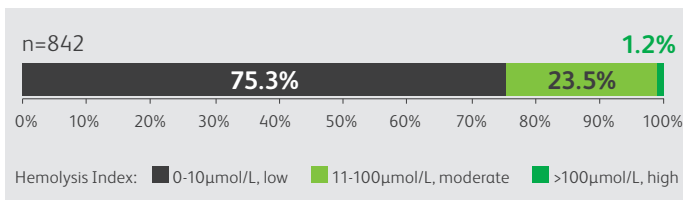
Accurate results across the healthcare continuum with BD Barricor™

Haemolysis: a major source of inaccurate results

- 1 one of the most common interferences in routine testing;
- 2 primary driver of the need for re-draw.

BD Barricor™ 3.5 mL partial draw tube supports the emergency department with a low rate of haemolysis.

Emergency departments are the major sources of hemolysed samples as IV cannula blood draws are common practice (up to 80%).



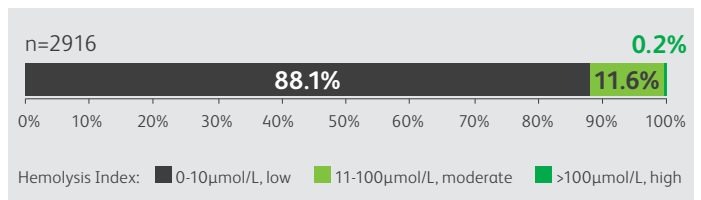
1.2 % Haemolysis rate with ED patients in 3.5 mL BD Barricor™ tubes is below the American Society of Clinical Pathology benchmark rate of 2 % according to the American Society of Clinical Pathology.⁶

Collection device impact⁵

- 1 IV Cannula: 5.6% hemolysed samples;
- 2 Venipuncture: 0.3% hemolysed samples.

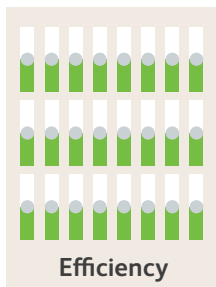
BD Barricor™ 5.5mL full draw tube lower haemolysis rates in routine blood collection.

Samples for routine testing are most commonly collected via venipunctures reducing the risk of haemolysis.



BD Barricor™ full draw tube ensures low haemolysis in conventional venipuncture collection such as in outpatient clinics.⁷

BD Barricor™ – added value for your lab



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



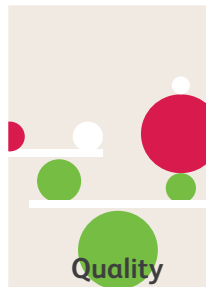
Process control

Consistent accurate results delivery accelerate the diagnostic process



Solid retest

If retests are required, stable samples deliver accurate results



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



Artefact reduction

High sample quality is the base for accurate testing



Inert separation

The mechanical separator does not interact with the sample

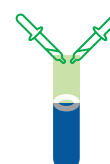


BD Barricor™ delivers a faster time-to-result for all patients with no clotting time and a reduction in centrifugation time of up to 7 minutes.



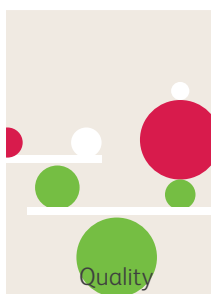
Right the first time

Accurate results do not need re-processing

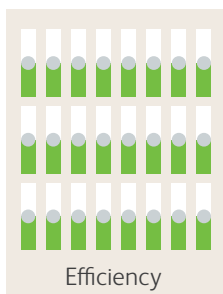


Fewer tubes to process

Test consolidation can accelerate results delivery



Quality



Efficiency



Fast diagnosis

BD Barricor™ yields Accuracy and much more: Quality, Efficiency and Fast Diagnosis.

You can discover how plasma mechanical separation leverages these benefits bringing a value to your processes bigger than the sum of the individual parts.

Ask your local BD representatives for more information and references on BD Barricor™.



To learn more, check the website of the BD Barricor™ Scientific Forum:
<http://lp.bd.com/Barricor-webinars.html>

Based on talks at BD Barricor™ Scientific Forum, April 2018

1. BD White Paper VS9295, Within-Tube Stability of Selected Routine Chemistry Analytes and Immunoassays in BD Vacutainer® Barricor™ Tubes in Comparison with BD Vacutainer® PST™ II and SST™ II Advance Tubes at Multiple Time Points Post Centrifugation, 2016
BD White Paper VS 9377, Within-Tube Stability of Lactate Dehydrogenase in BD Vacutainer® Barricor™ Tubes with Dark Gray Stopper, BD Vacutainer® PST™ II and BD Vacutainer® SST™ II Advance Tubes, 2017
2. Fleming C. et Al., EFLM Conference 2017
3. Schrapf A. et Al., Clinica Chimica Acta, 2019
4. BD White Paper VS9168, Comparison of the BD Vacutainer® Barricor™ Tube with the BD Vacutainer® PST™ II Tube and BD Vacutainer® Serum Tube for Selected Therapeutic Drugs, 2016
Steuer, C., Huber, A.R., Bernasconi, L., Where clinical chemistry meets medicinal chemistry. Systematic analysis of physico-chemical properties predicts stability of common used drugs in gel separator serum tubes, Clinica Chimica Acta 2016; 462:23-27, DOI: 10.1016/j.cca.2016.08.014
5. <https://www.ncbi.nlm.nih.gov/pubmed/18237663>
6. Ch. Ramakers, BD Vacutainer® Barricor™ tube in the emergency department: reduced hemolysis rates using partial draw tubes with reduced vacuum; Clin Chem Lab Med 2017.
7. Fleming, BD Barricor forum, 2018

BD - Europe, Terre-Bonne Park - A4, Route de Crassier 17, 1262 Eysins, Switzerland

bd.com

BD, the BD Logo, and BD Barricor are trademarks of Becton, Dickinson and Company. All other trademarks are the property of their respective owners. © 2019 BD and its subsidiaries. All rights reserved. XEUR-0006-19-A. WEU296.2

