










# Order of Draw for BD Plus Vacutainer® tubes

## Phlebotomy Technique: Recommended Order of Draw<sup>1</sup>

Closure Color	Collection Tube	Mix by Inverting
1	Sterile samples (e.g., Blood Cultures)	
2	 Citrate tubes*  ACD tubes	3 to 4 times 8 to 10 times
3	 SST™II Gel tubes  Plain Serum tubes (with clot activator)	8 to 10 times 8 to 10 times
4	 PST™II Gel tubes  Heparin tubes	8 to 10 times 8 to 10 times
5	  EDTA tubes	8 to 10 times
6	 Fluoride Oxalate and Fluoride EDTA (glucose tubes)	8 to 10 times

\* This tube is acceptable for routine coagulation testing (e.g., aPTT and PT/INR). For some special coagulation testing where low level activation of coagulation factors may be of particular concern,\*\* the use of a second blue top tube as a 'discard' tube is recommended'. Because of 'dead space' in the tubing of winged (butterfly) sets, a discard tube should also be used where 'small draw volume' (1.8 mL, 2.7 mL) citrate tubes are the first drawn and a winged collection set is used.

\*\* Activation may be induced by tissue factor (tissue thromboplastin) introduced into the initial sample stream as the needle traverses the subcutaneous tissue.

**Note regarding ESR:** In accordance with CLSI (Clinical & Laboratory Standards Institute) formerly NCCLS recommendations<sup>1</sup>, ESR tubes should be placed at position 2 above. Because their position in the order is not as critical as for citrate specimens for coagulation testing, it is common practice to place this tube at the end of the list to provide greater priority to tubes that will generally be required for more clinically important tests.

1. CLSI (Clinical & Laboratory Standards Institute) formerly NCCLS document H3-A5 "Procedures for the Collection of Diagnostic Blood Specimens by Venipuncture". 5th Edition, Dec. 2003.

BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2008 BD APAS007 05/08

**BD Diagnostics**  
Preanalytical Systems

**Australia**

4 Research Park Drive  
Macquarie University Research Park  
North Ryde NSW 2113

**New Zealand**

8 Pacific Rise  
Mt Wellington, Auckland