**STUDY DESIGN**

1. For the familiarization period, the steps of drawing blood, trasferring samples to the laboratory, analysis and sample storage for 24 hour analysis were demonstratively practiced to identify the difficulties in whole process.
2. For within-tube and between tube precision, serum samples were collected from 20 healthy individuals (10 females, 10 males) in 2 discrete reference (BD) and 2 discrete test (Vacusel) tubes. Precision experiment was only performed with control tubes in 5 days (4 control subjects for one day). Patient tubes were not included in precision study.
3. In addition to 20 healthy subjects, samples were collected from 30 patients (10 from endocrinology, 10 from cardiology, 10 from nephrology units) into 1 reference (BD) and 1 test (Vacusel) tubes. Total results of 50 tubes (30 patients and 20 controls) were used for calculations of bias % and tube comparison.
4. All tubes were labeled with proper identification (tube barcoding step). Blood samples were randomly collected (reference-test and test-reference or test-test and reference-reference tubes) by the same phlebotomist at the same time (9-10 am) each day. Tourniquet application time was determined to be less than 1 minute. Blood drawing time, visual coagulation minutes were recorded and tubes were centrifuged in 30 minutes (CLSI recommendation: In 2 hours).
5. Serum yields, clotting time, gel barrier formation, presence of fibrin and visual hemolysis were scored by 4 independent laboratory specialists.
6. Prior to analysis, all calibration and control steps were checked for autoanalyzer. Experiments were performed via chemistry kits with same lot numbers. Calibrators were also used from same lots. Device performance were checked both pre- and post-analysis period via control sample analysis.
7. Candidate parameters were selected and three replicate analysis were performed from primer tubes (no aliquots) at the same time with same autoanalyzer in a random order (reference-test and test-reference or test-test and reference-reference tubes) from all 80 control tubes (T0 values).
8. All tubes were immediately transferred to 2-8 0C (not frozen). Same test panel were analyzed after 24 hours (T24 values). T0 and T24 values were recorded.