Table 4

Common "false alarm" mistakes – operator failure instead of instrument failure

1. Injecting the wrong vial (mistaken position in autosampler tray) for SST – no or wrong peaks
2. Injecting the wrong volume (typically 0 volume) for SST – no peaks or low peak areas
3. Insufficient liquid in vials for SST – high %CV with latter injections having low peak area, no peak
4. Insufficient equilibration of LC column before running SST – no peaks and/or shifted Rt, bad peak shapes, increased peak widths, poor resolution - particularly for early eluting analytes
5. Mobile phase runs out during SST – no peaks or shifted Rt, low LC pressure
6. Autosampler wash runs out during SST – low peak areas, carryover
7. Ion source not reconnected or valve not directed to MS/MS after cleaning cones (curtain plate, skimmer, skimmer plate) – no peaks, no baseline (except electronic noise)
8. Wrong acquisition method used for SST – no or wrong peaks
9. Wrong data analysis method used for SST – no peaks, selected peaks are missing
10. Data files stored in wrong project for SST – no peaks, no baseline