Next generation sequencing based multi-gene mutational screen for acute myeloid leukemia using miseq: applicability for diagnostics and disease monitoring

**Validation**
archival AML/MDS samples

**MiSeq for AML/MDS diagnostics**

- **Assay performance**
  - sensitivity
  - specificity
  - reproducibility

- **Clinical utility**
  - low sample requirement
  - high-multiplexed screening of genes & samples
  - high detection sensitivity

- **Advantages**
  - multiple platform consolidation
  - multiple markers screening
  - clonal heterogeneity residual disease

**MiSeq**
customized TruSeq cancer panel (54 genes)

**Ion Torrent - PGM**
AmpliSeq cancer panel (46 genes)

**Classical sequencing platforms**
Sanger sequencing pyrosequencing fragment analysis

**Complete concordance**