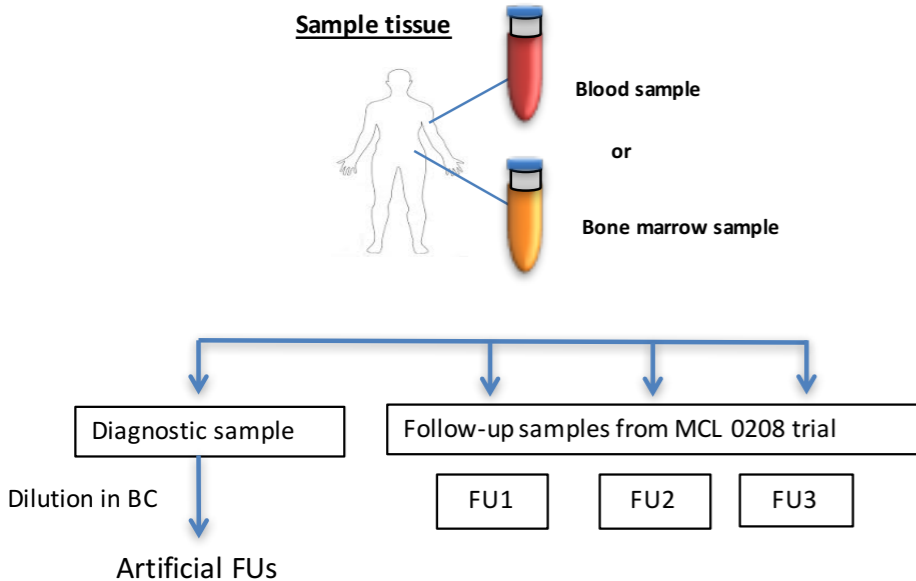
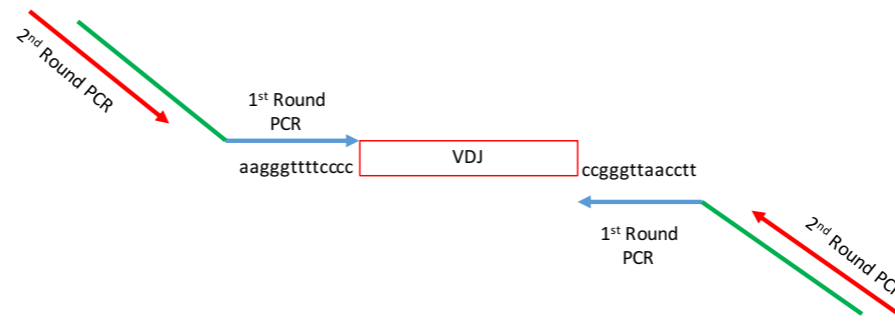


Step 1: Sample processing and gDNA extraction



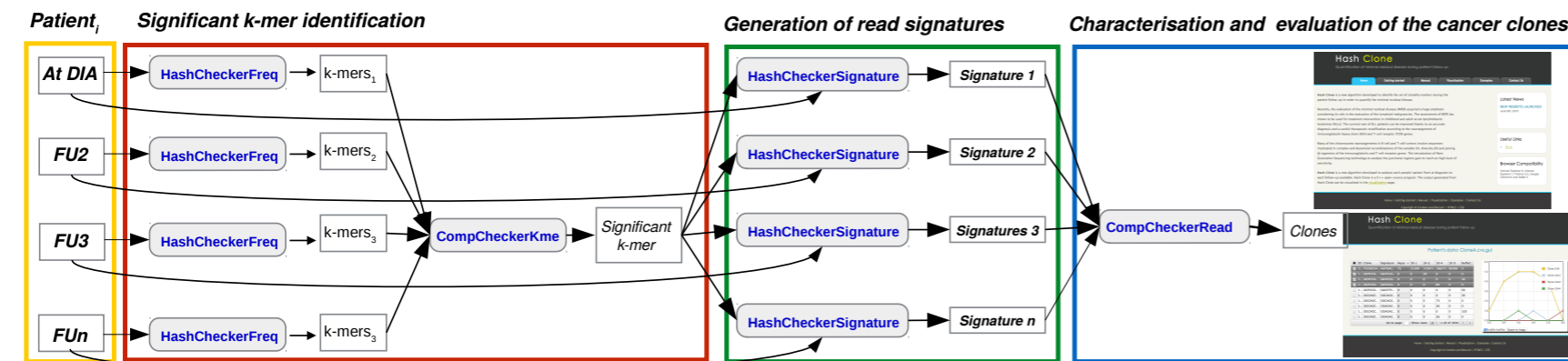
Step 2: Libraries preparation



Step 3: Sequencing and FASTQ quality check



Step 4: HashClone analysis



Step 5: Filtered strategy for B-cell clones selection

Phase A:
Clone selection in diagnostic samples with reads frequency higher than 5%

Phase B:
IMGT software: HashClone-VDJ sequences alignment to IGH reference database to check sequence homology.

Step 6: MRD monitoring

$$FU \text{ (Q-PCR value)} = \frac{Dia \text{ (Q-PCR value)} \times FU \text{ (NGS reads)}}{Dia \text{ (NGS reads)}}$$