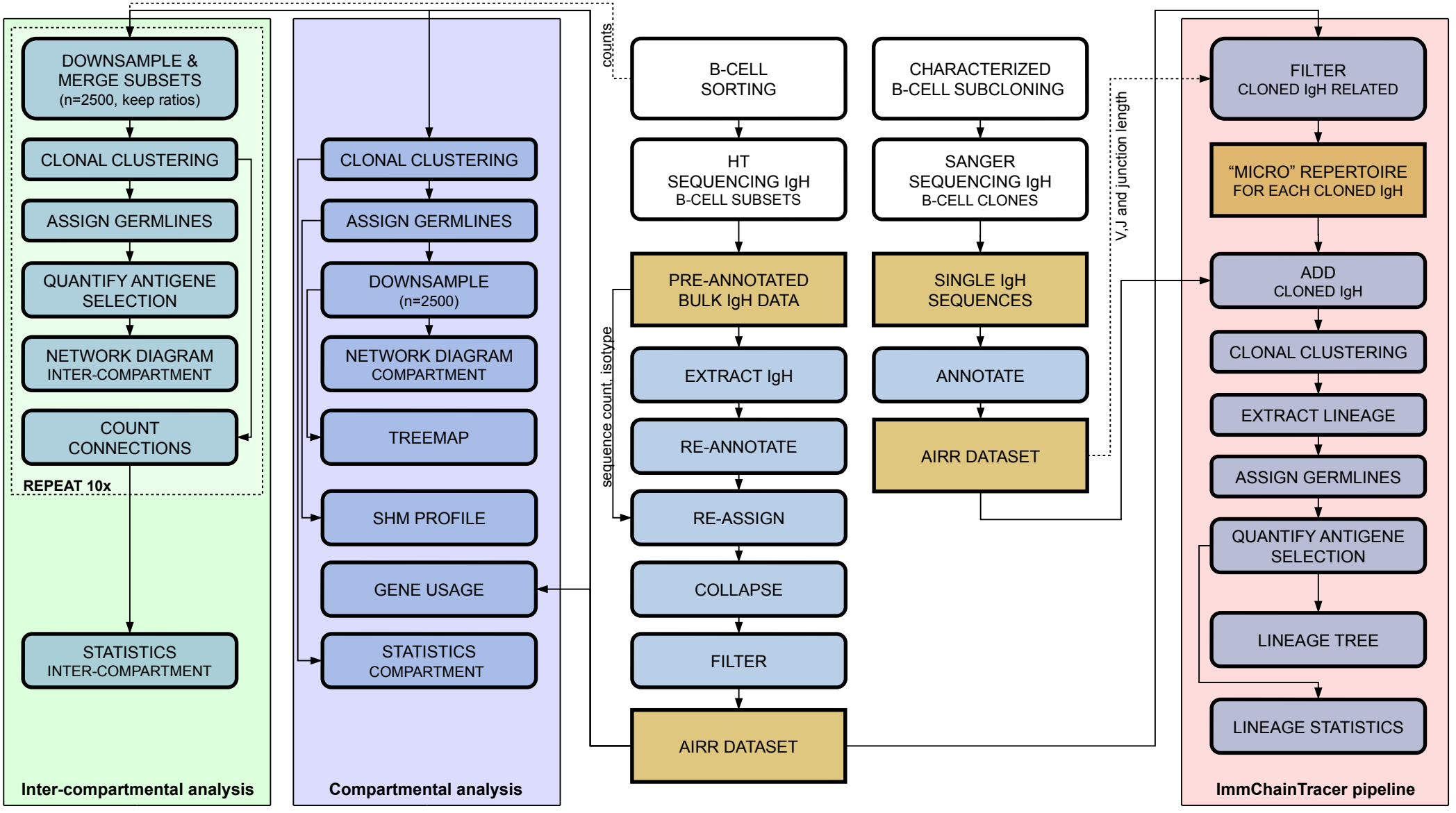
DOWNSAMPLE & MERGE SUBSETS (n=2500, keep ratios)
CLONAL CLUSTERING
ASSIGN GERMLINES
QUANTIFY ANTIGENE SELECTION
NETWORK DIAGRAM INTER-COMPARTMENT
COUNT CONNECTIONS
REPEAT 10x
STATISTICS INTER-COMPARTMENT
Inter-compartmental analysis
CLONAL CLUSTERING
ASSIGN GERMLINES
DOWNSAMPLE (n=2500)
NETWORK DIAGRAM COMPARTMENT
TREEMAP
SHM PROFILE
GENE USAGE
STATISTICS COMPARTMENT
Compartmental analysis
counts
B-CELL SORTING
HT SEQUENCING IgH B-CELL SUBSETS
PRE-ANNOTATED BULK IgH DATA
EXTRACT IgH
RE-ANNOTATE
RE-ASSIGN
COLLAPSE
FILTER
AIRR DATASET
sequence count, isotype
CHARACTERIZED B-CELL SUBCLONING
SANGER SEQUENCING IgH B-CELL CLONES
SINGLE IgH SEQUENCES
ANNOTATE
AIRR DATASET
V,J and junction length
FILTER CLONED IgH RELATED
"MICRO" REPERTOIRE FOR EACH CLONED IgH
ADD CLONED IgH
CLONAL CLUSTERING
EXTRACT LINEAGE
ASSIGN GERMLINES
QUANTIFY ANTIGENE SELECTION
LINEAGE TREE
LINEAGE STATISTICS
ImmChainTracer pipeline