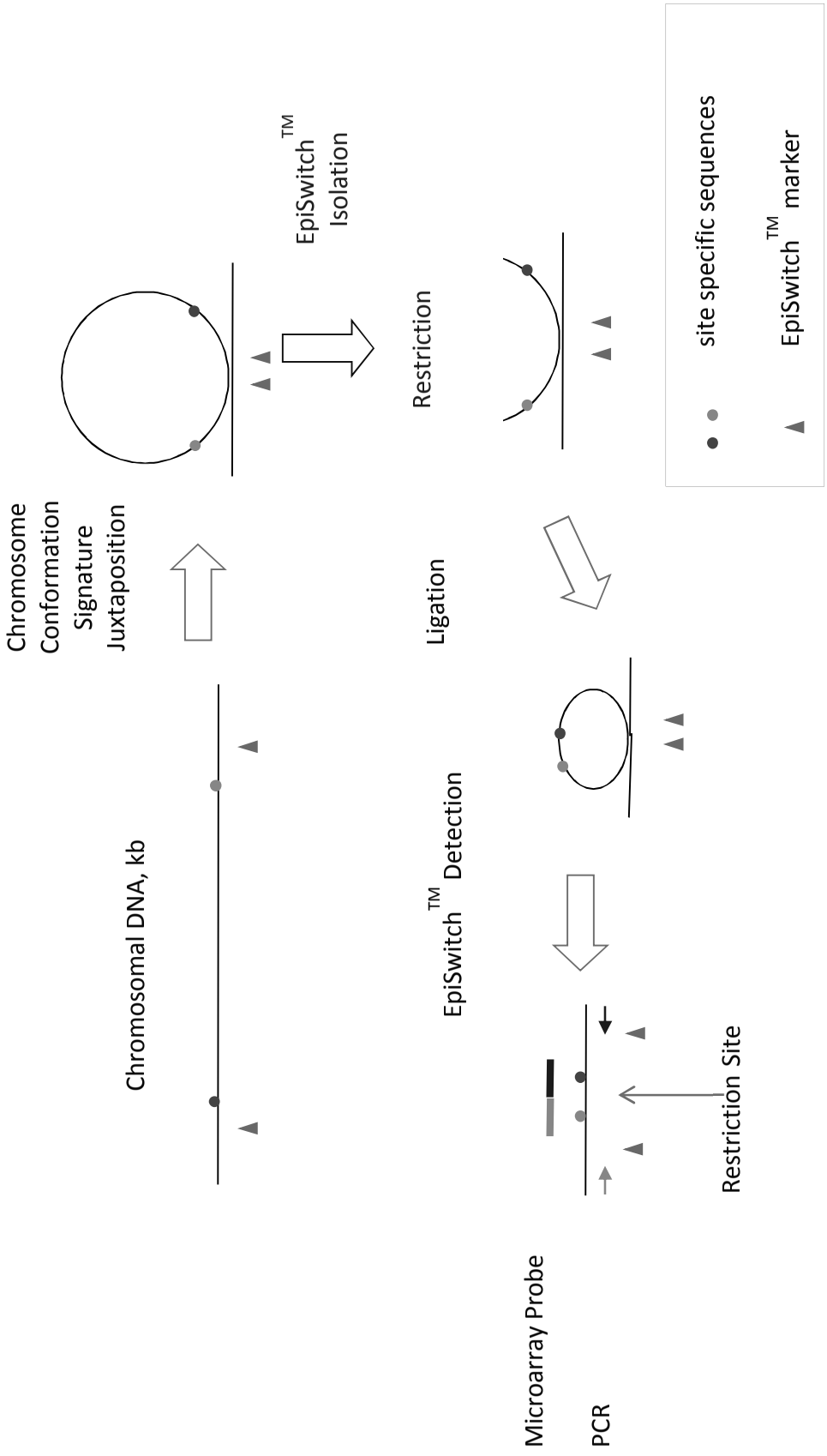
FIGURE 1


Chromosome Conformation Signature Juxtaposition
EpiSwitch™ Isolation
Restriction
Ligation
EpiSwitch™ Detection
Chromosomal DNA, kb
Microarray Probe
PCR
Restriction Site
site specific sequences
EpiSwitch™ marker

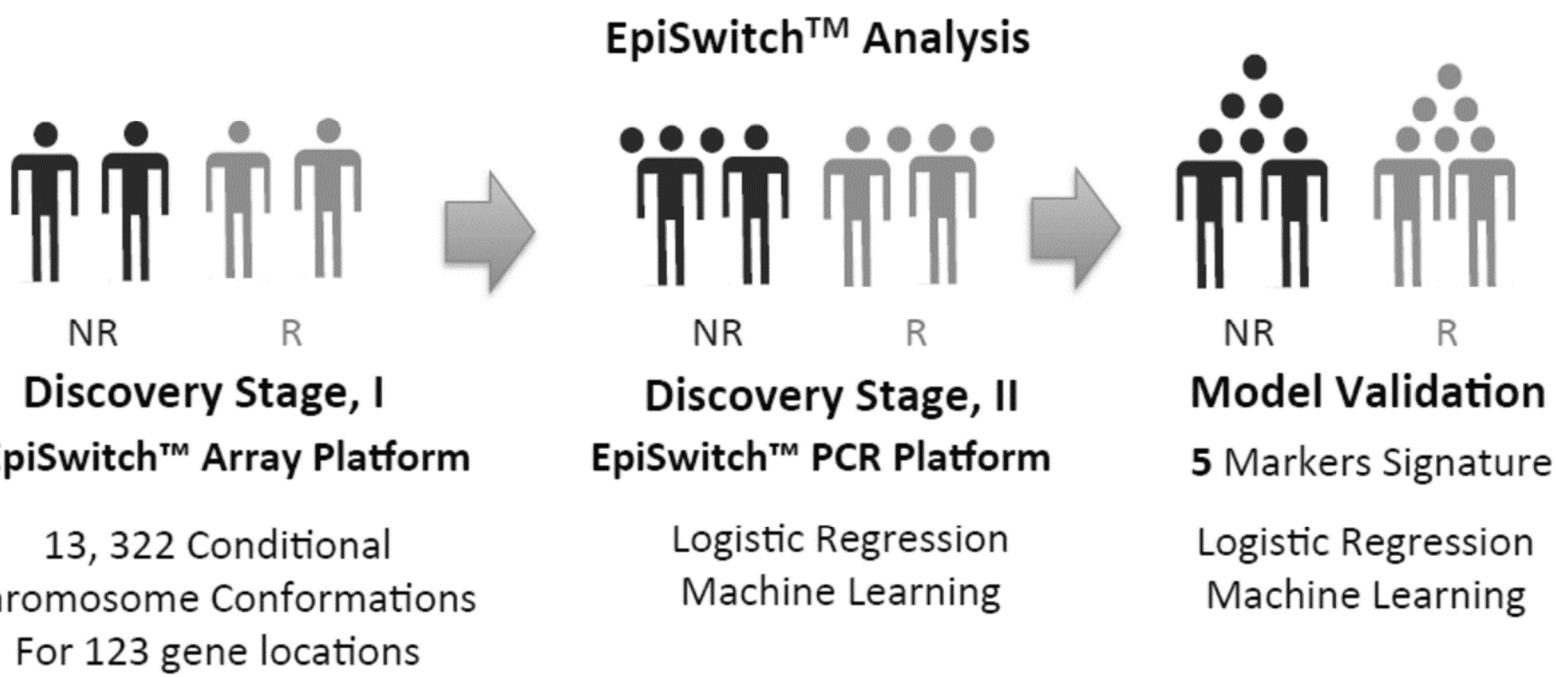
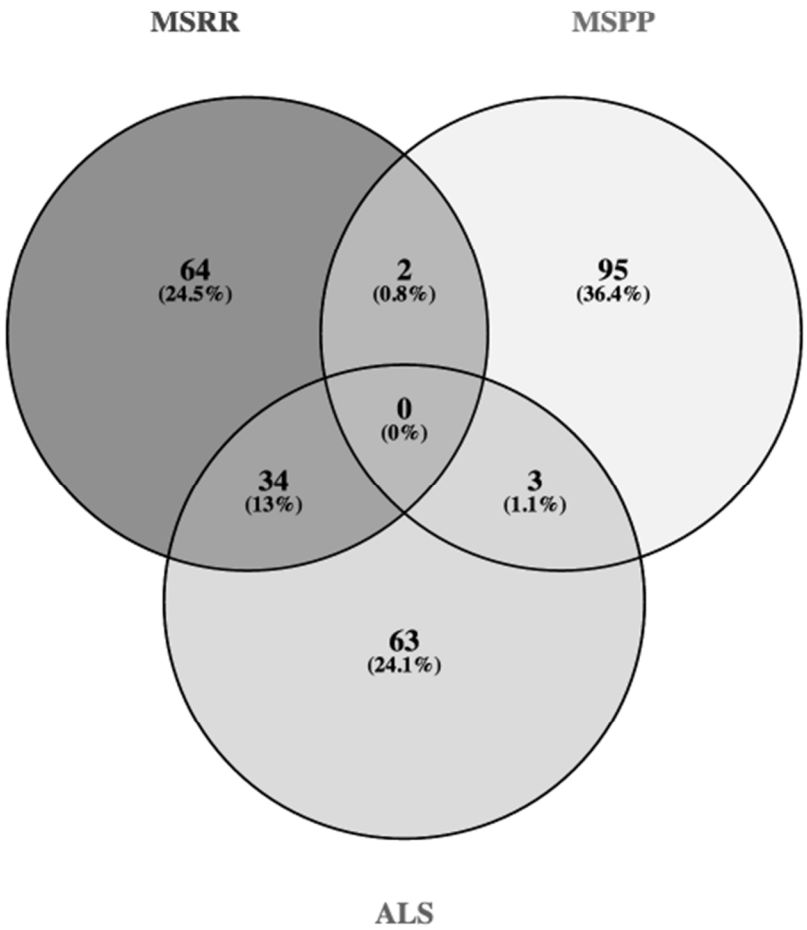

EpiSwitch™ Analysis
NR
R
Discovery Stage, I
EpiSwitch™ Array Platform
13, 322 Conditional
Chromosome Conformations
For 123 gene locations
NR
R
Discovery Stage, II
EpiSwitch™ PCR Platform
Logistic Regression
Machine Learning
NR
R
Model Validation
5 Markers Signature
Logistic Regression
Machine Learning

FIGURE 2

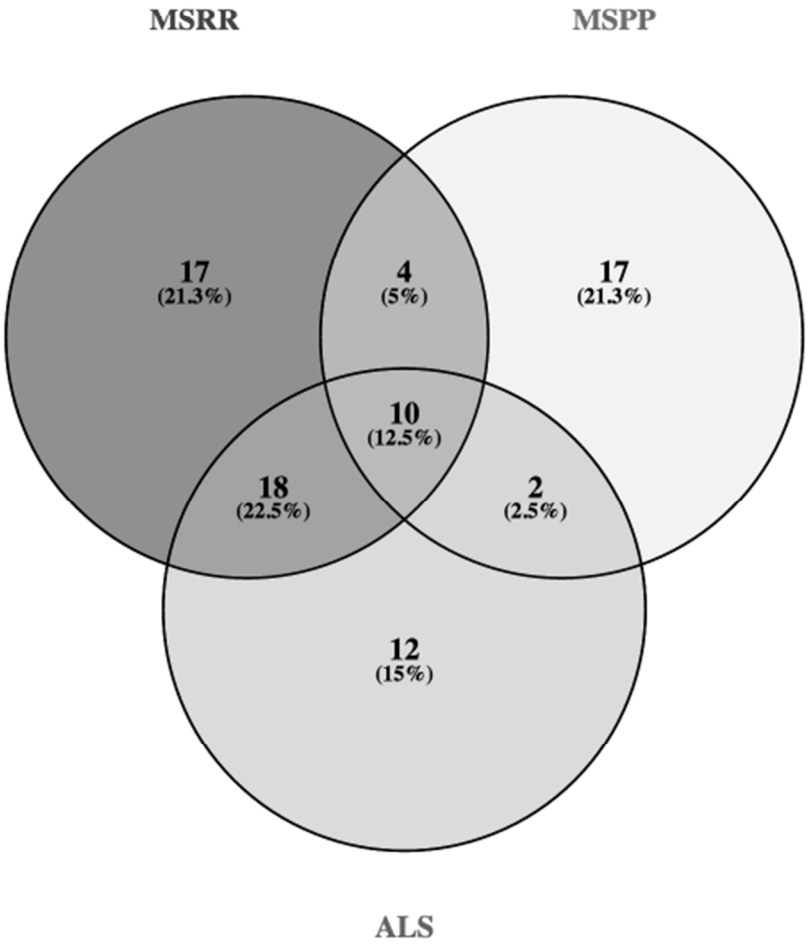
MSRR, MSPP, & ALS overlap of top 100 EpiSwitch™ Markers



Top 100 EpiSwitch™ markers from each comparisons : disease v pooled Healthy control

FIGURE 3

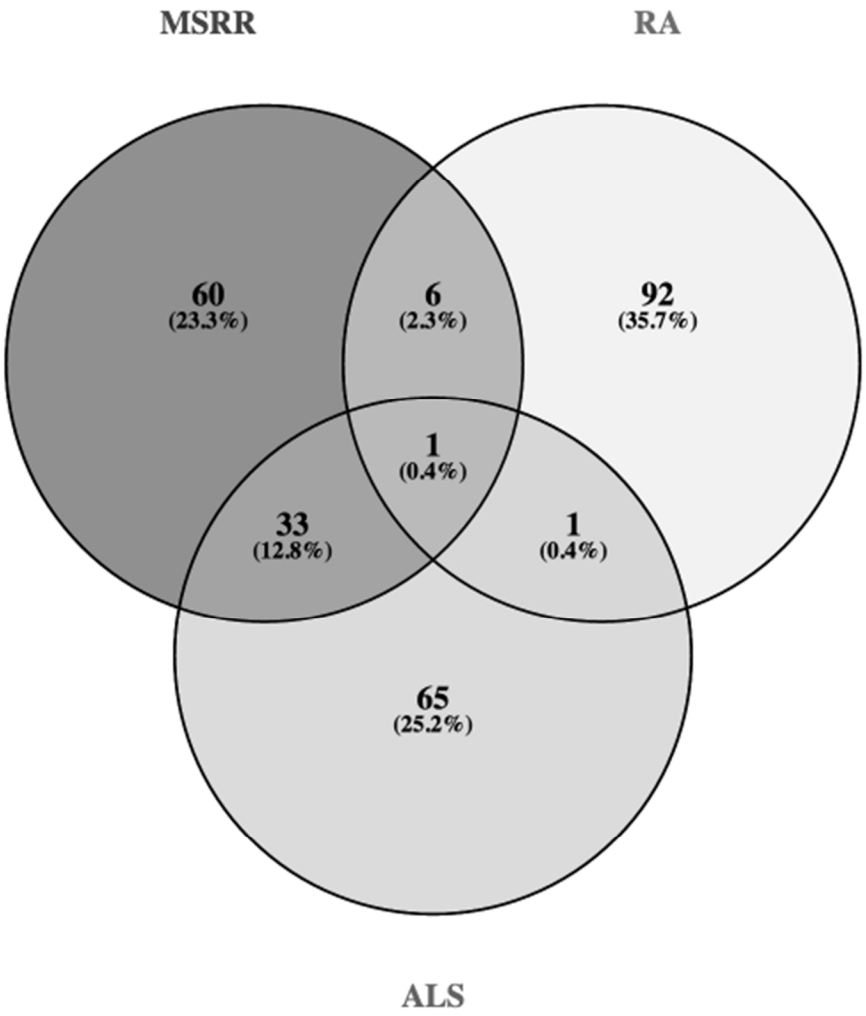
MSRR, MSPP, & ALS overlap of Genes with significant EpiSwitch™ Markers



Loci (genetic locations) enriched with EpiSwitch™ markers from the top 100 of : disease v pooled Healthy Controls

FIGURE 4

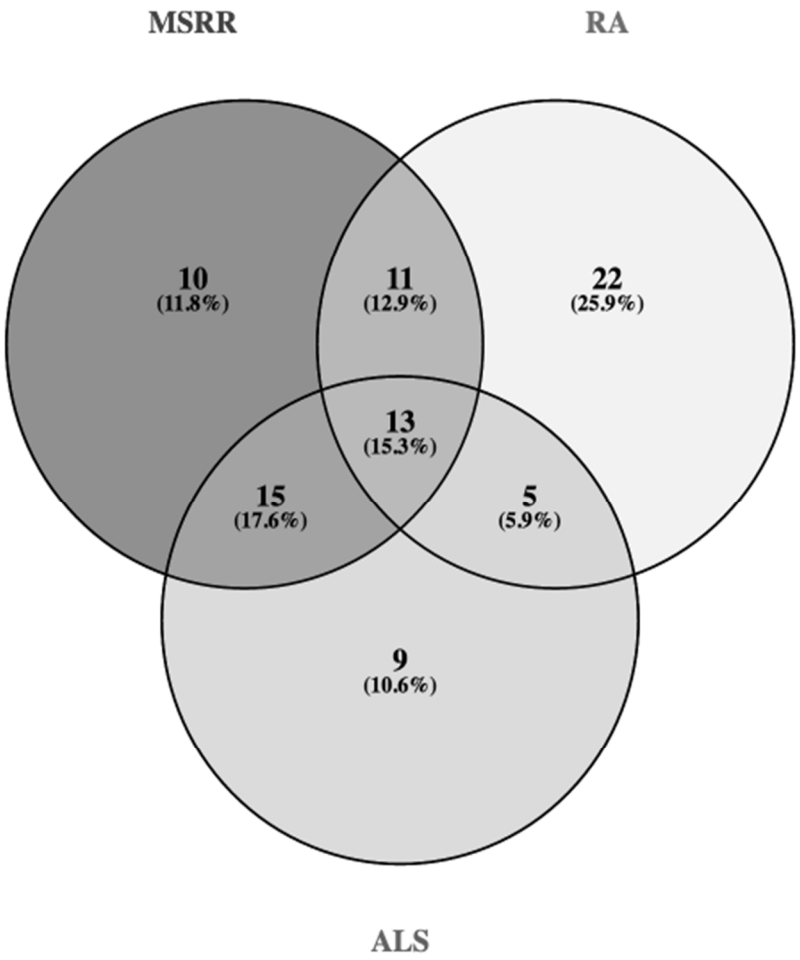
MSRR, RA, & ALS overlap of top 100 EpiSwitch™ Markers



Top 100 EpiSwitch™ markers from each comparisons : disease v pooled Healthy control

FIGURE 5

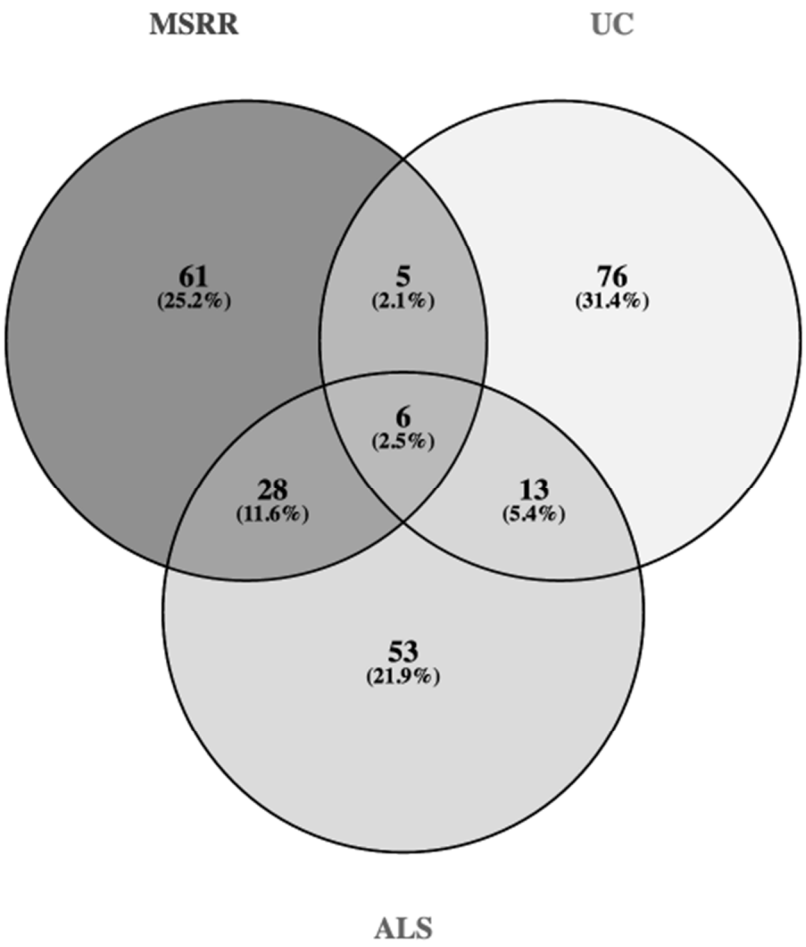
MSRR, RA, & ALS Genes with significant EpiSwitch™ Markers



Loci (genetic locations) enriched with EpiSwitch™ markers from the top 100 of : disease v pooled Healthy Controls

FIGURE 6

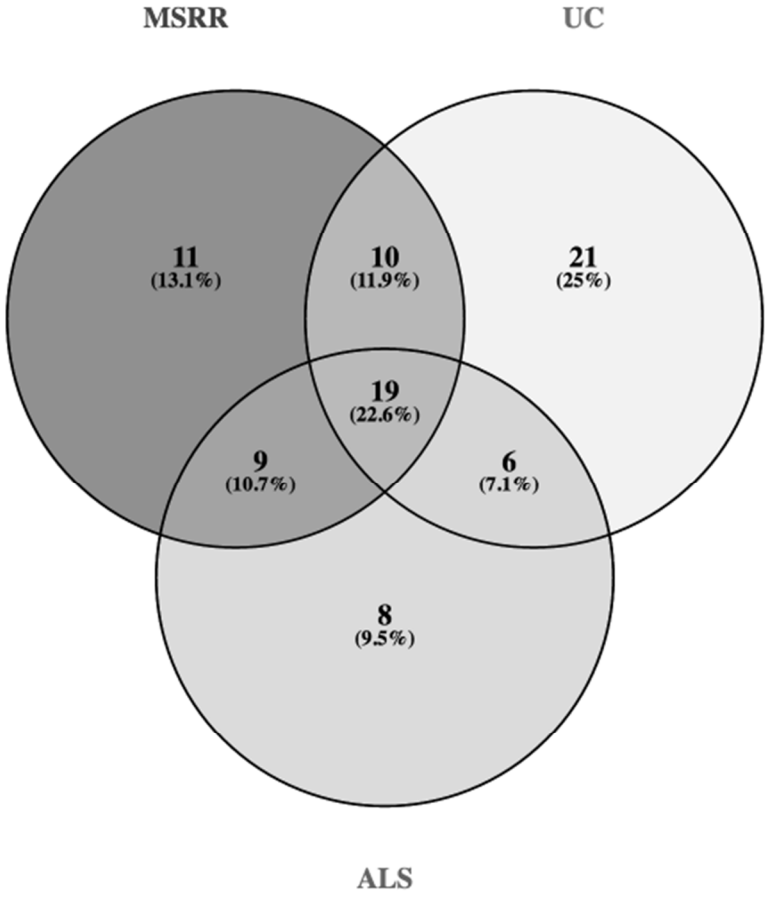
MSRR, UC, & ALS overlap of top 100 EpiSwitch™ Markers



Top 100 EpiSwitch™ markers from each comparisons : disease v pooled Healthy control

FIGURE 7

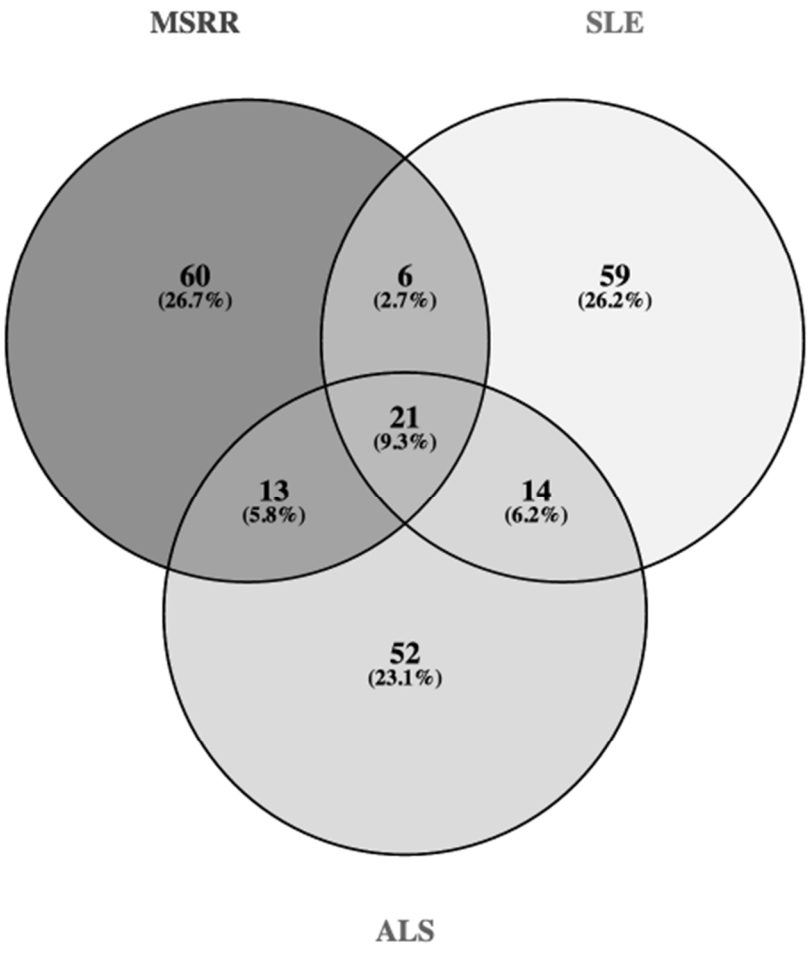
MSRR, UC, & ALS Genes with significant EpiSwitch™ Markers



Loci (genetic locations) enriched with EpiSwitch™ markers from the top 100 of : disease v pooled Healthy Controls

FIGURE 8

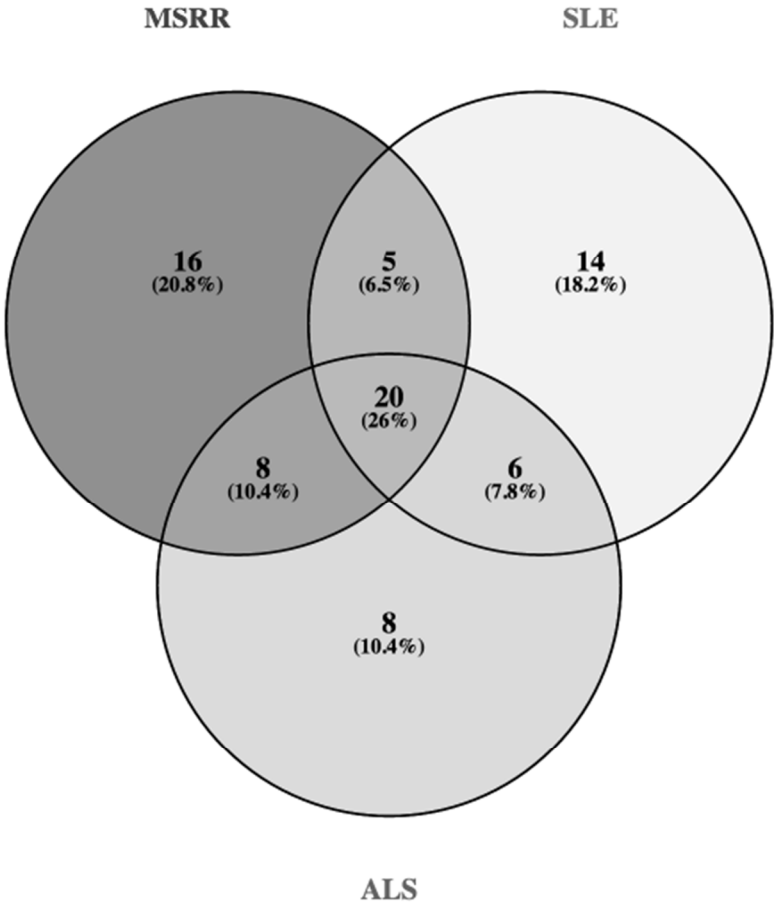
MSRR, SLE, & ALS overlap of top 100 EpiSwitch™ Markers



Top 100 EpiSwitch™ markers from each comparisons : disease v pooled Healthy control

FIGURE 9

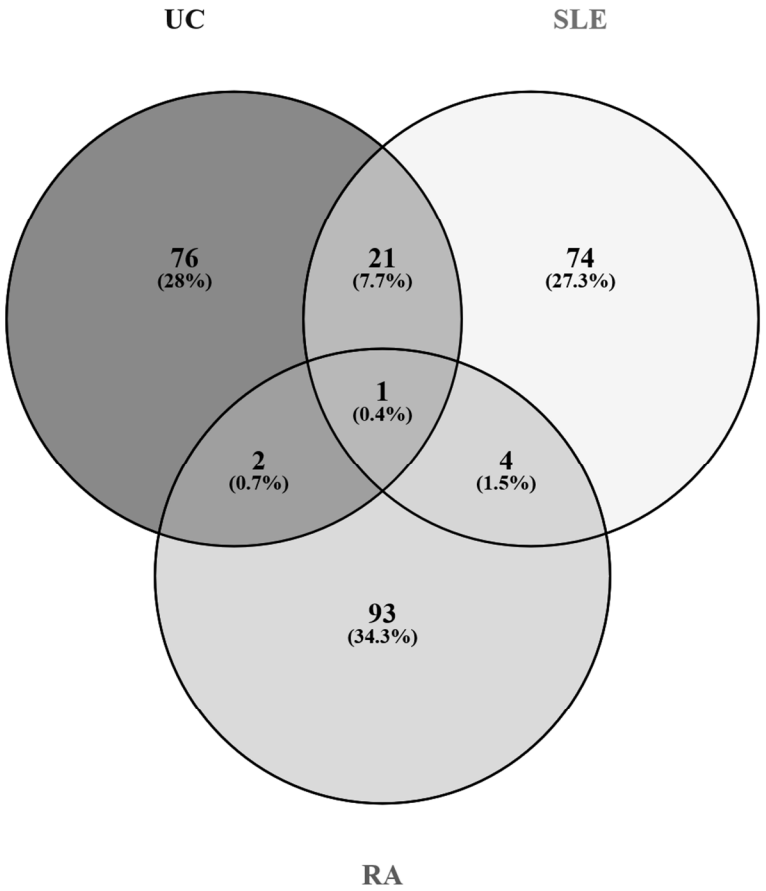
MSRR, SLE, & ALS Genes with significant EpiSwitch™ Markers



Loci (genetic locations) enriched with EpiSwitch™ markers from the top 100 of : disease v pooled Healthy Controls

FIGURE 10

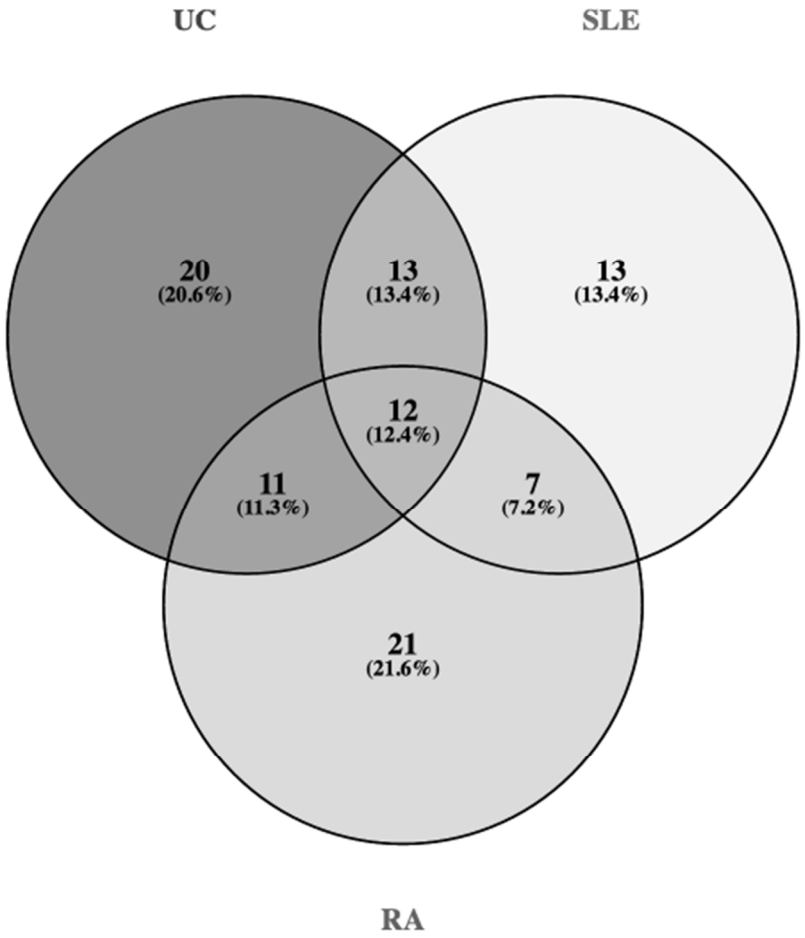
UC, SLE, & RA overlap of top 100 EpiSwitch™ Markers



Top 100 EpiSwitch™ markers from each comparisons : disease v pooled Healthy control

FIGURE 11

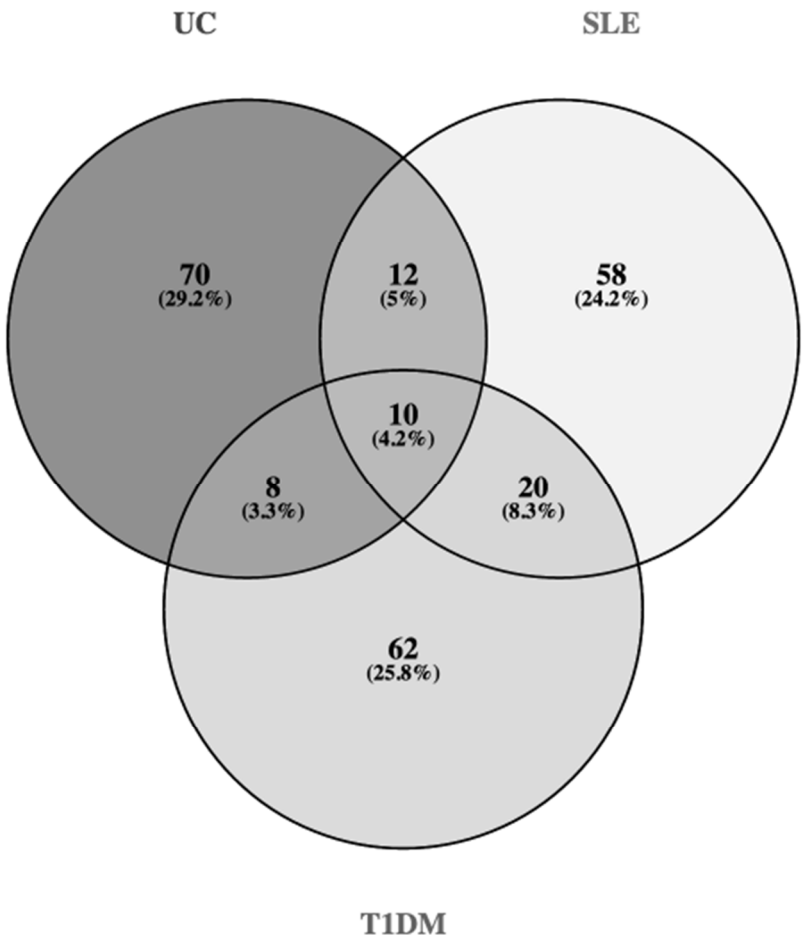
UC, SLE, & RA Genes with significant EpiSwitch™ Markers



Loci (genetic locations) enriched with EpiSwitch™ markers from the top 100 of : disease v pooled Healthy Controls

FIGURE 12

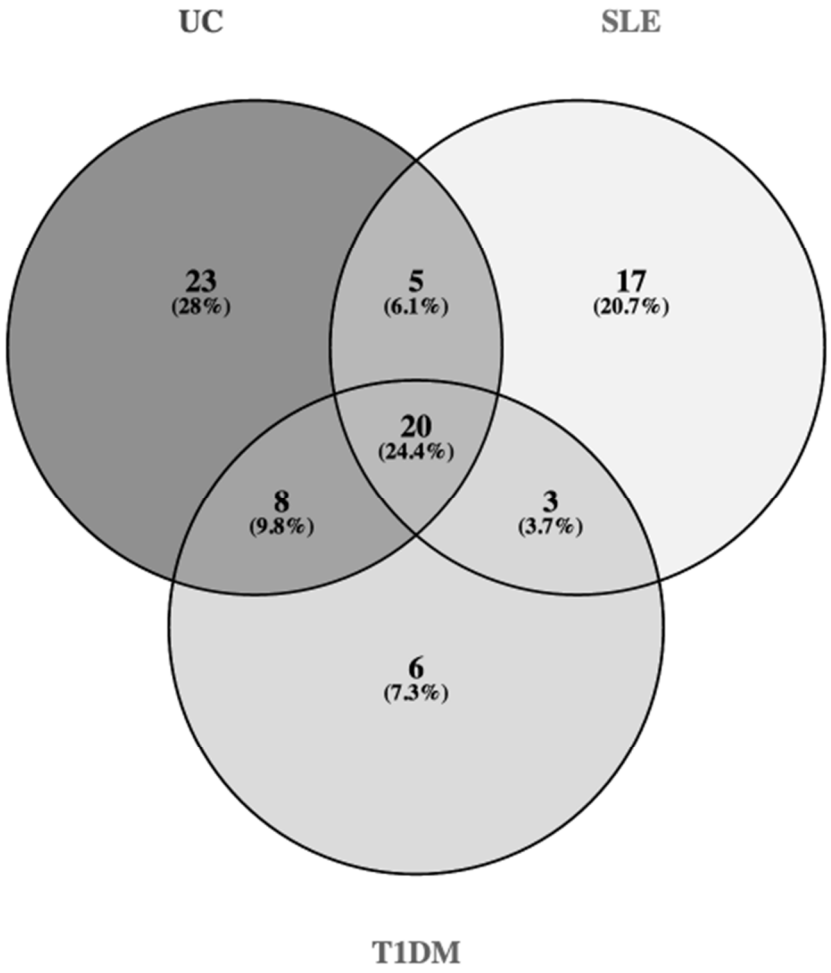
UC, SLE, & T1DM overlap of top 100 EpiSwitch™ Markers



Top 100 EpiSwitch™ markers from each comparisons : disease v pooled Healthy control

FIGURE 13

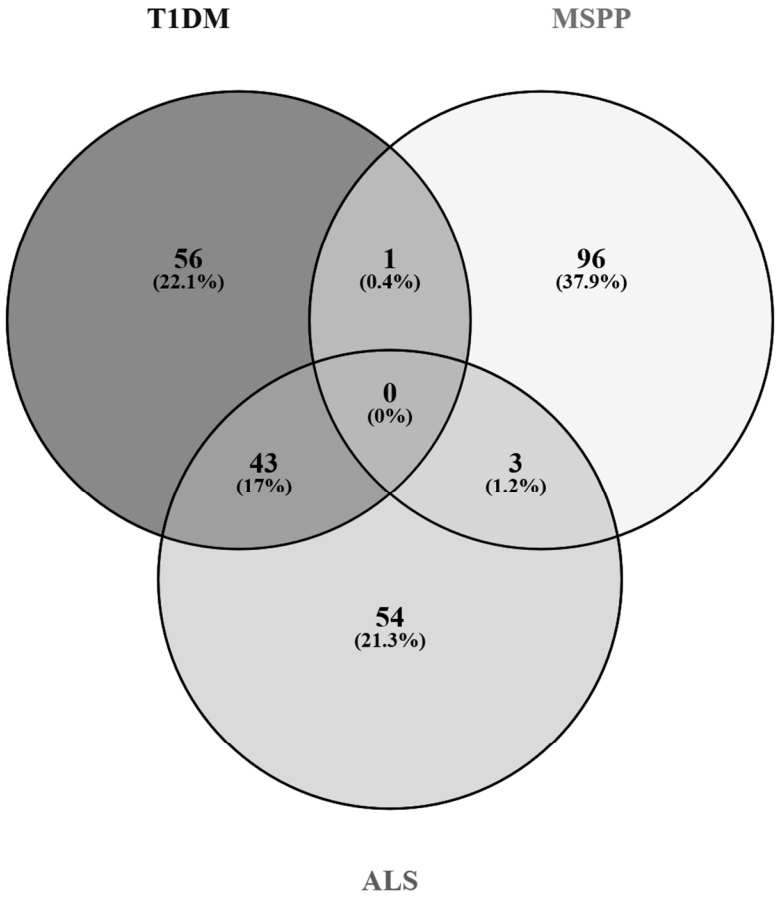
UC, SLE, & T1DM Genes with significant EpiSwitch™ Markers



Loci (genetic locations) enriched with EpiSwitch™ markers from the top 100 of : disease v pooled Healthy Controls

FIGURE 14

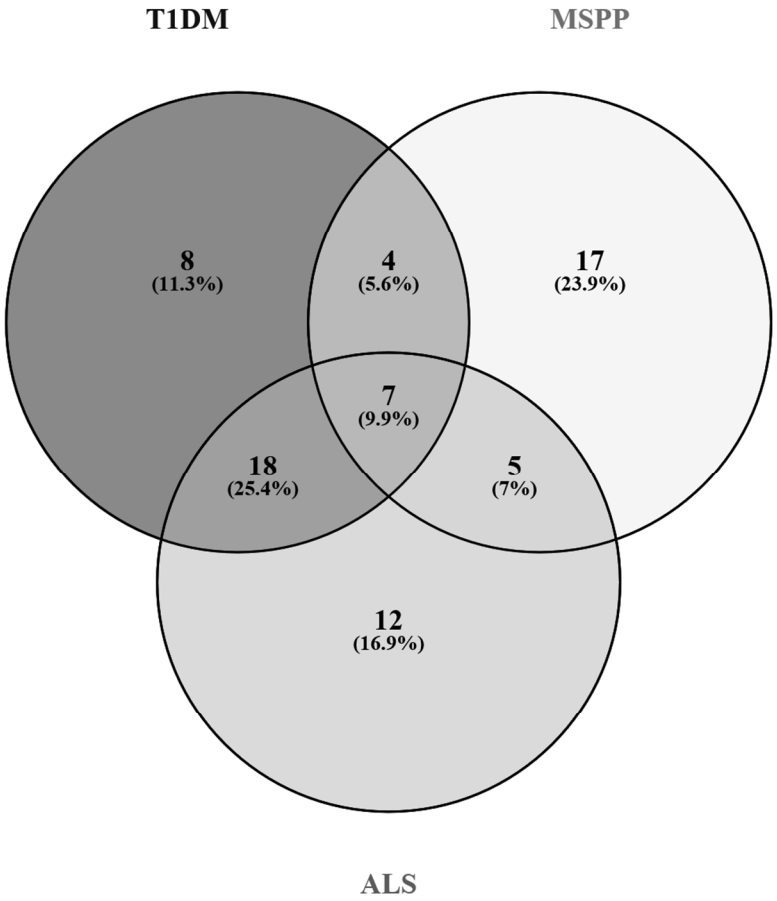
T1DM, MSPP, & ALS overlap of top 100 EpiSwitch™ Markers



Top 100 EpiSwitch™ markers from each comparisons : disease v pooled Healthy control

FIGURE 15

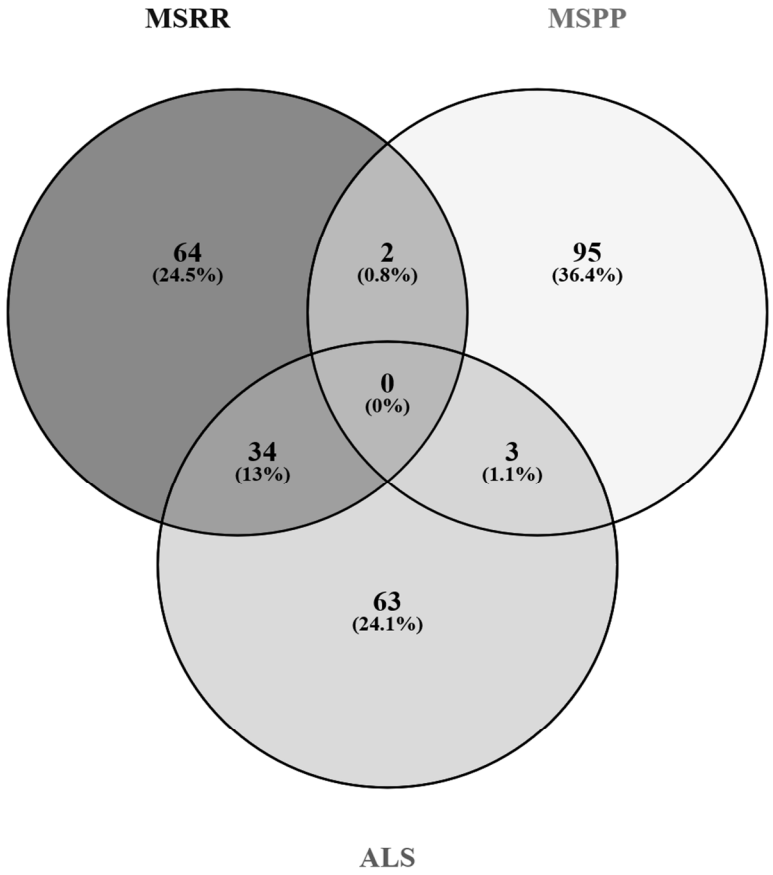
T1DM, MSPP, & ALS Genes with significant EpiSwitch™ Markers



Loci (genetic locations) enriched with EpiSwitch™ markers from the top 100 of : disease v pooled Healthy Controls

FIGURE 16

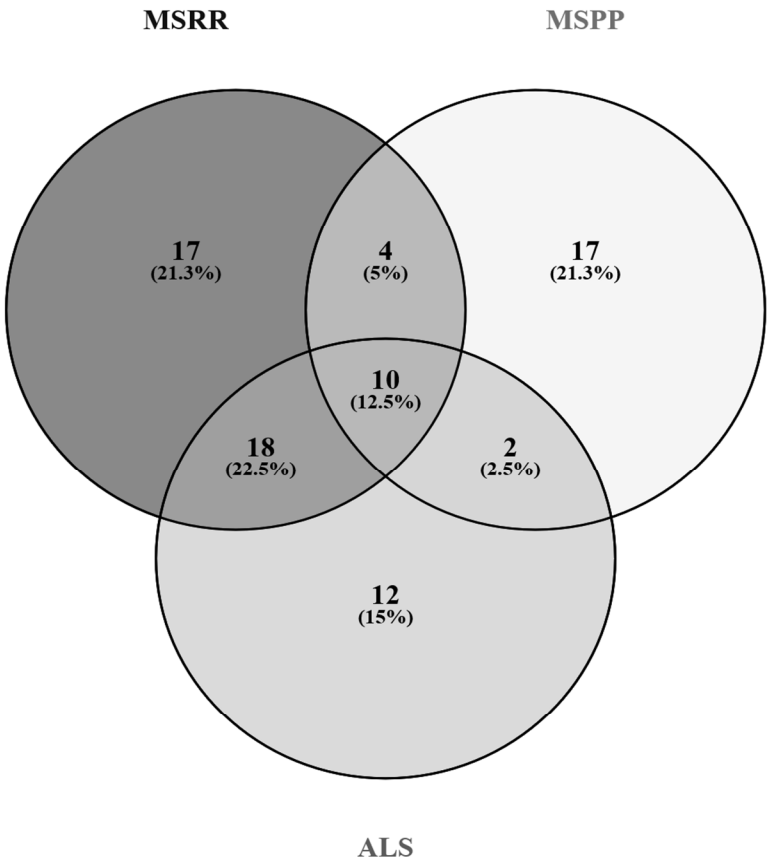
MSRR, MSPP, & ALS overlap of top 100 EpiSwitch™ Markers



Top 100 EpiSwitch™ markers from each comparisons : disease v pooled Healthy control

FIGURE 17

MSRR, MSPP, & ALS Genes with significant EpiSwitch™ Markers



Loci (genetic locations) enriched with EpiSwitch™ markers from the top 100 of : disease v pooled Healthy Controls

FIGURE 18