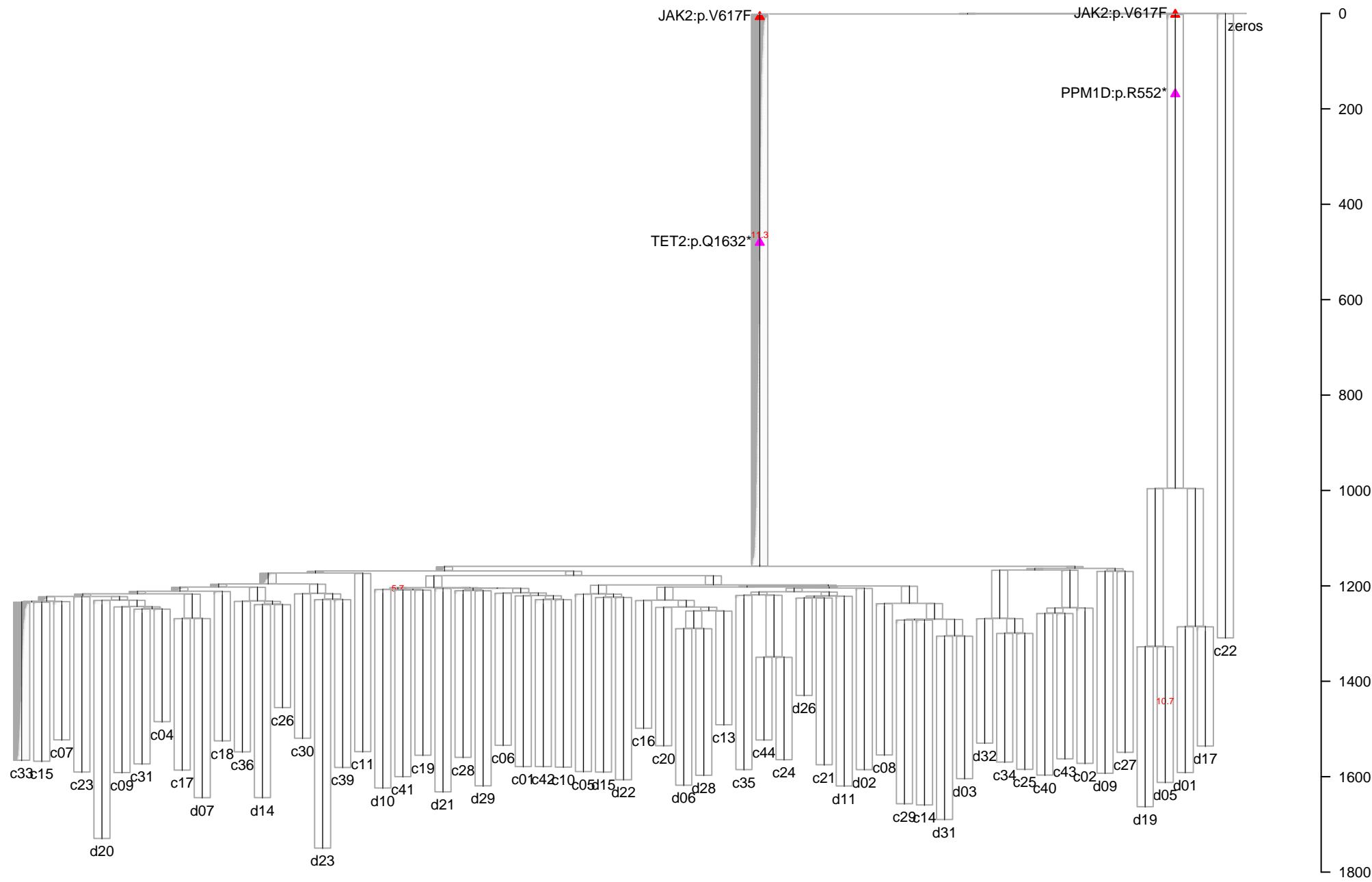


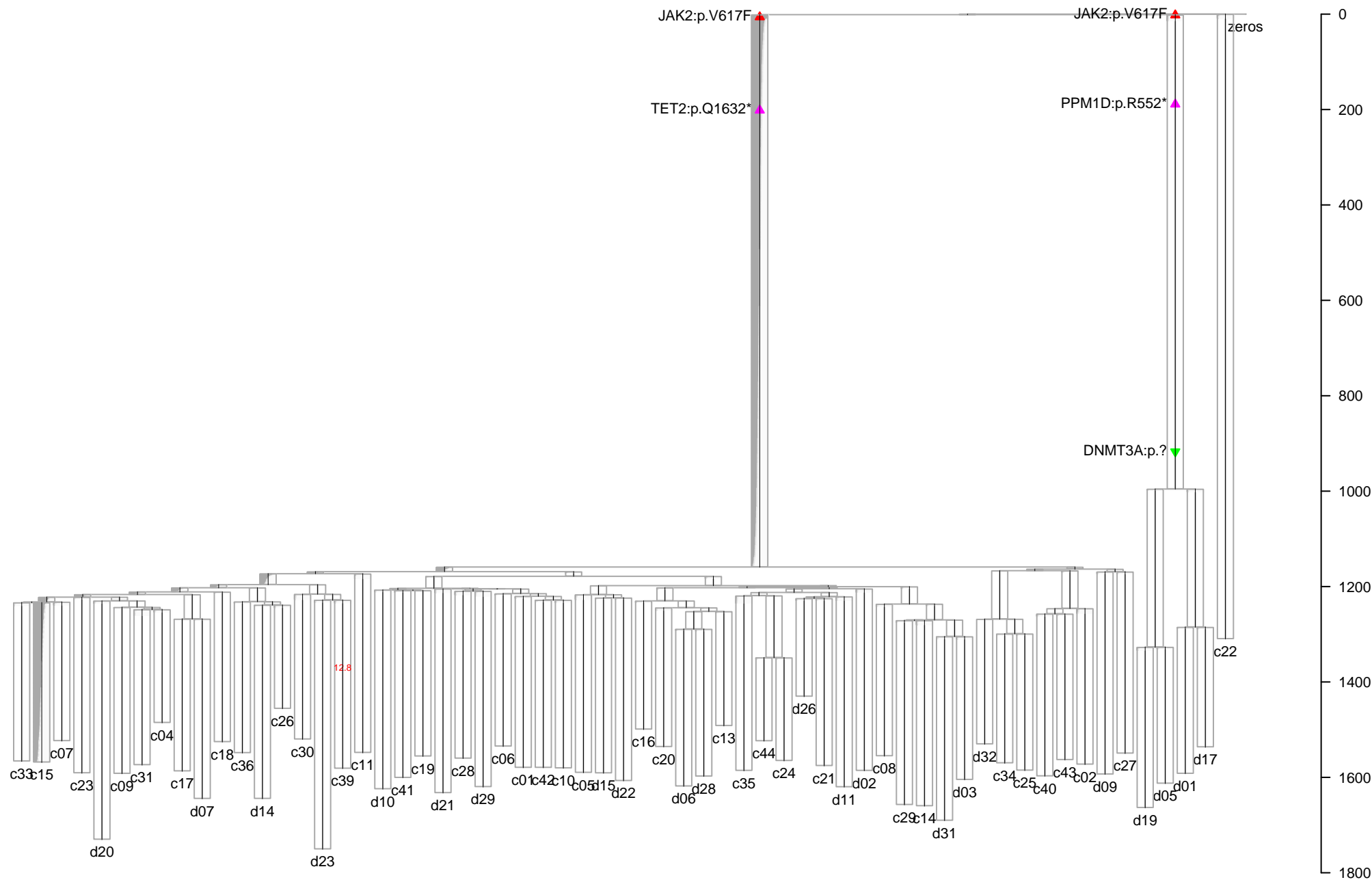
## Tree By Colony Quality Assessment

This file reports the VAF distribution of the variants assigned to each branch on a per colony basis. This allows one to 'walk through' the trees on a per colony basis to visualise both the branch placement and VAF of all the variants present in that single colony with respect to the rest of the tree. This is particularly helpful to ensure that variants belonging to a single colony are not found in non-ancestral branches whilst also allowing one to assess if other branches in the tree suffer from a lack of sensitivity for picking up specific variants. The report includes all colonies - including those that are dropped from the final tree and also some additional samples of interest. For colonies that are in the final tree it is expected that the VAFs will be clonal on branches that are ancestral to the colony of interest and zero for those that are not ancestral. Branches are highlighted if they show significant deviation from this expectation ( $VAF < 0.35$  and  $VAF > 0.05$ ; Binomial test on aggregate mutant read count and aggregate depth; blue  $p < 0.05$  and red  $p < 0.05/\text{number of branches}$ ). Branches where the depth is significantly lower than the depth of variants across the whole tree are annotated with the branch depth shown in red.

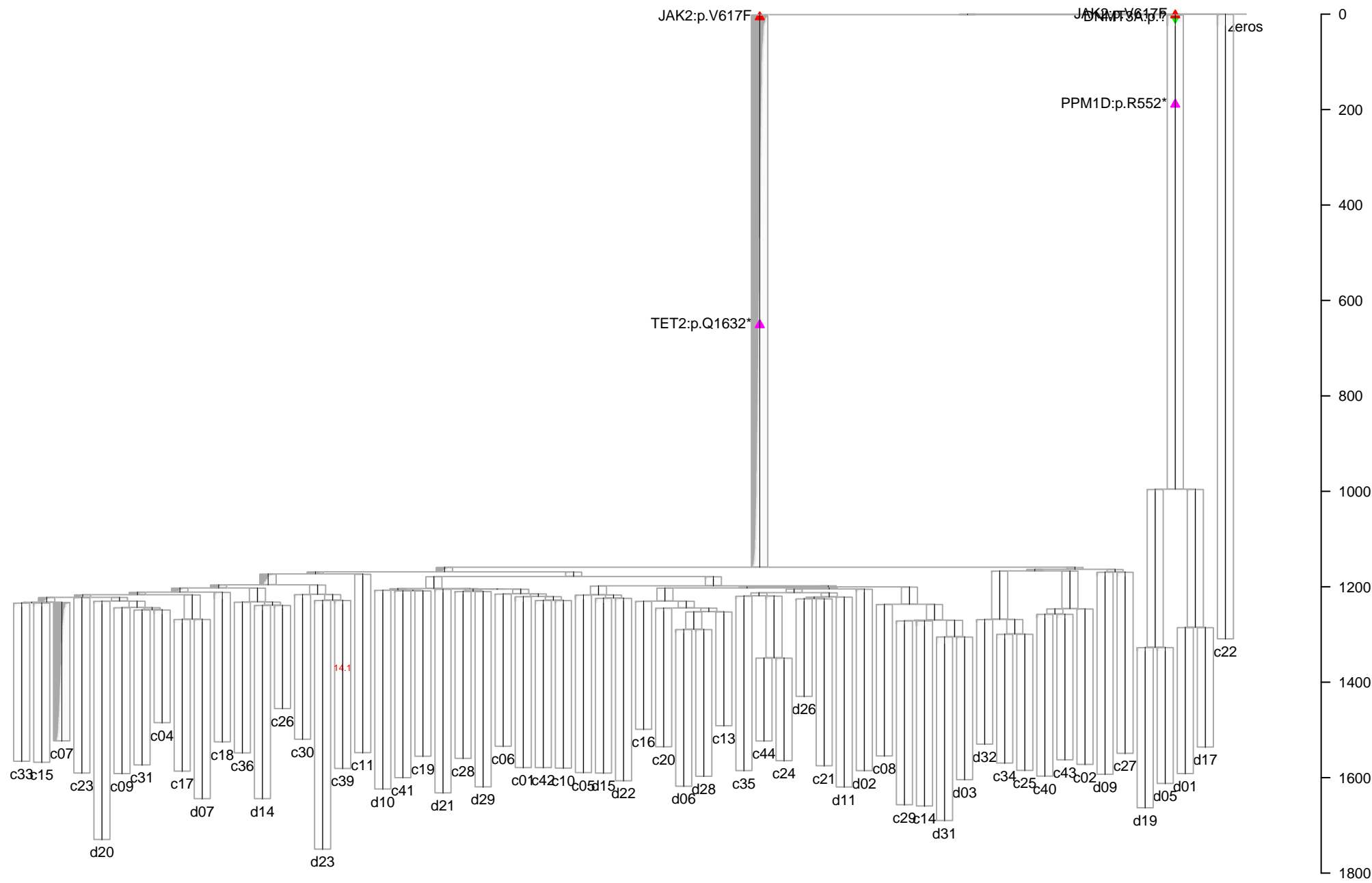
PD4781: Annotated with VAF from c33  
Mean Depth=11.70



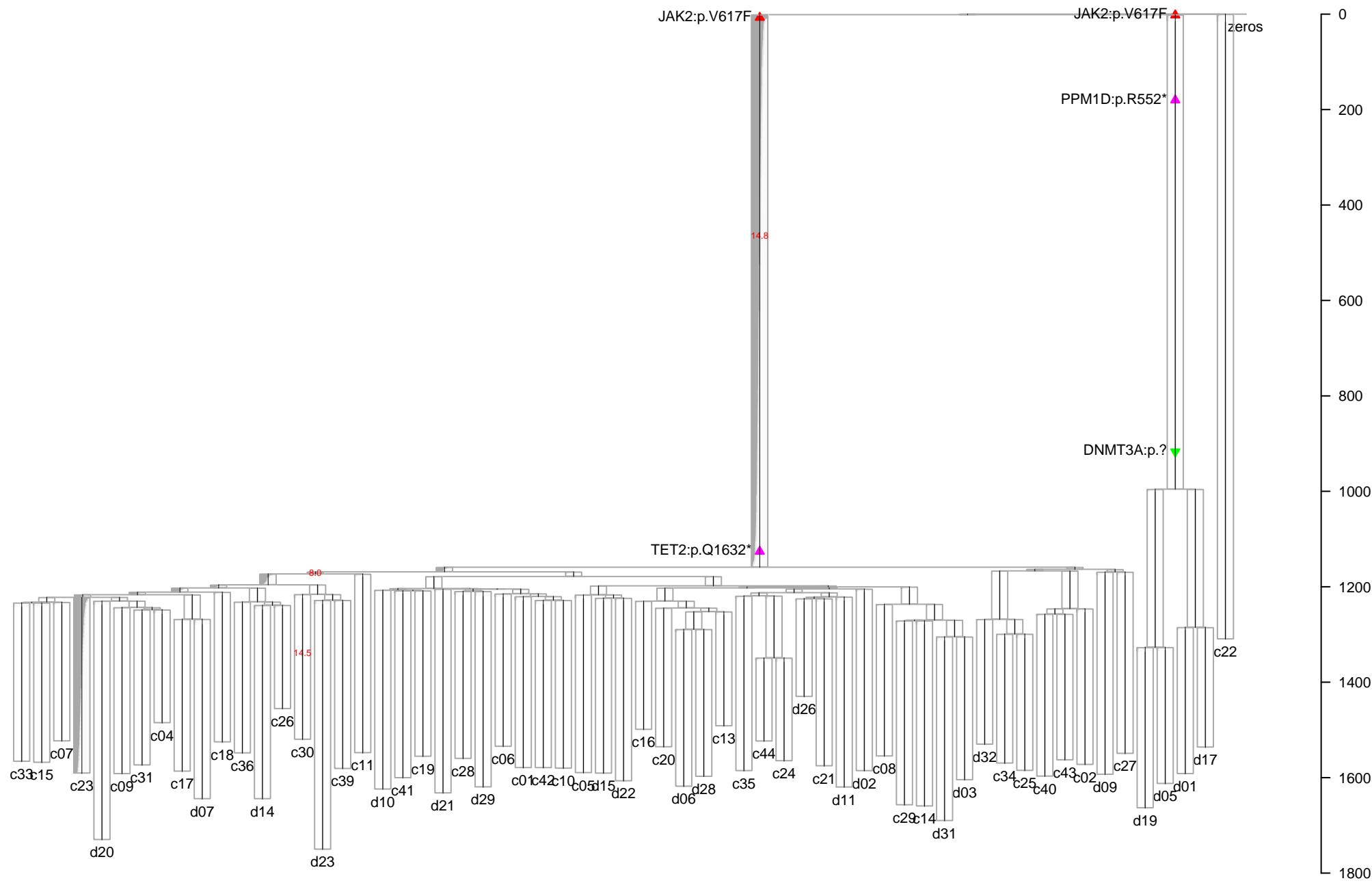
**PD4781: Annotated with VAF from c15**  
**Mean Depth=13.35**



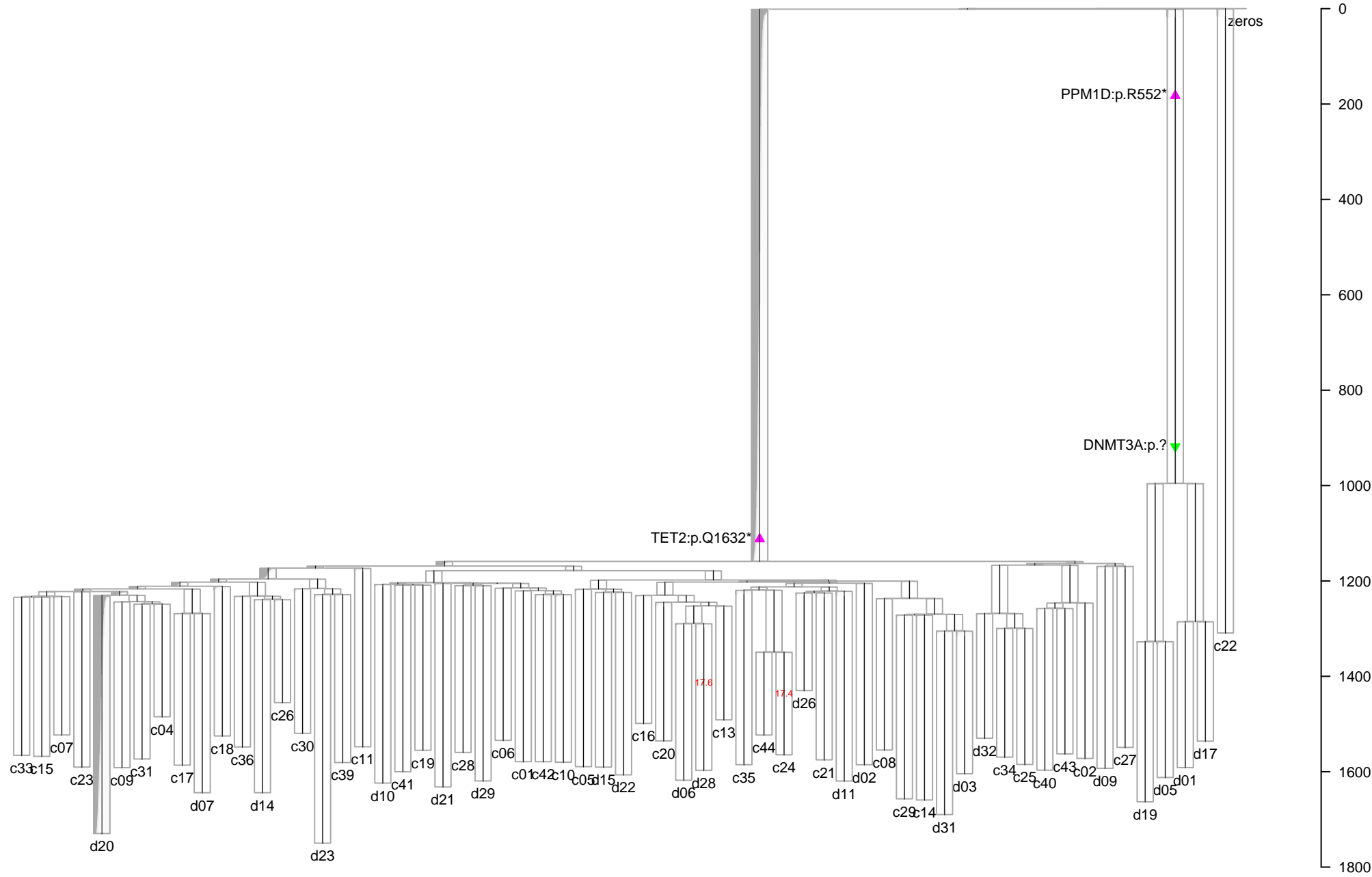
**PD4781: Annotated with VAF from c07**  
**Mean Depth=14.76**



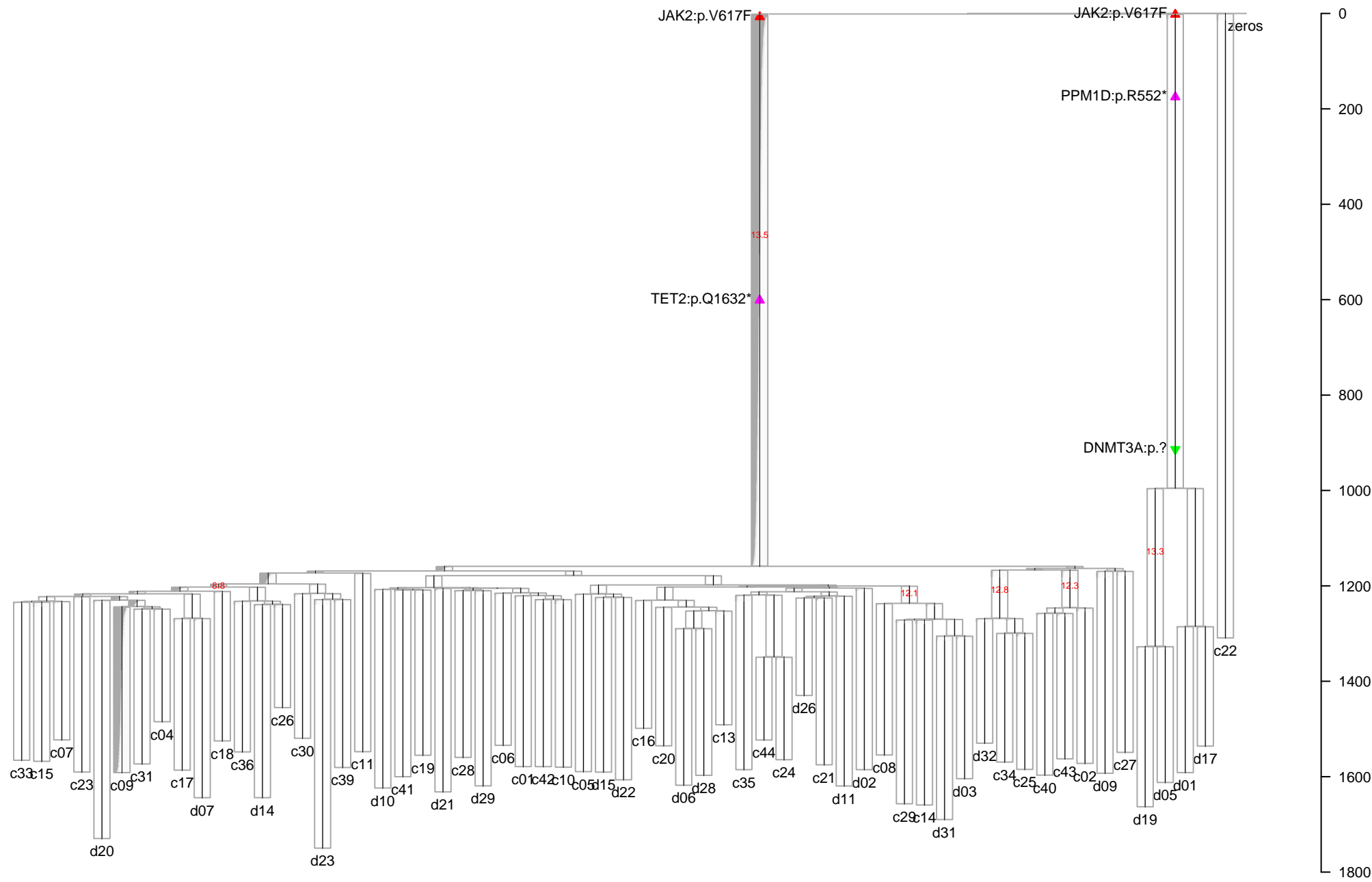
PD4781: Annotated with VAF from c23  
Mean Depth=15.25



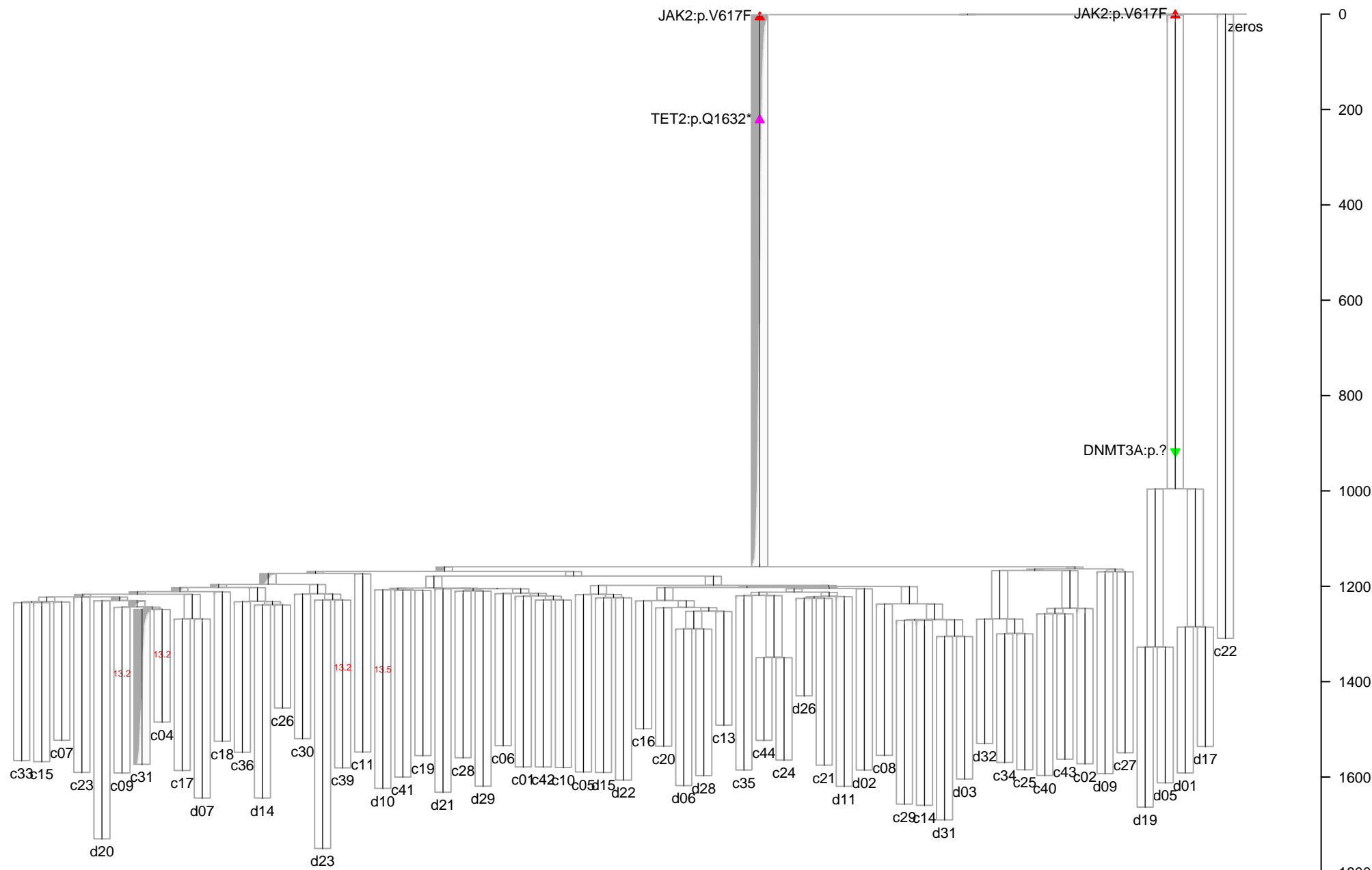
PD4781: Annotated with VAF from d20  
Mean Depth=18.38



PD4781: Annotated with VAF from c09  
Mean Depth=13.95

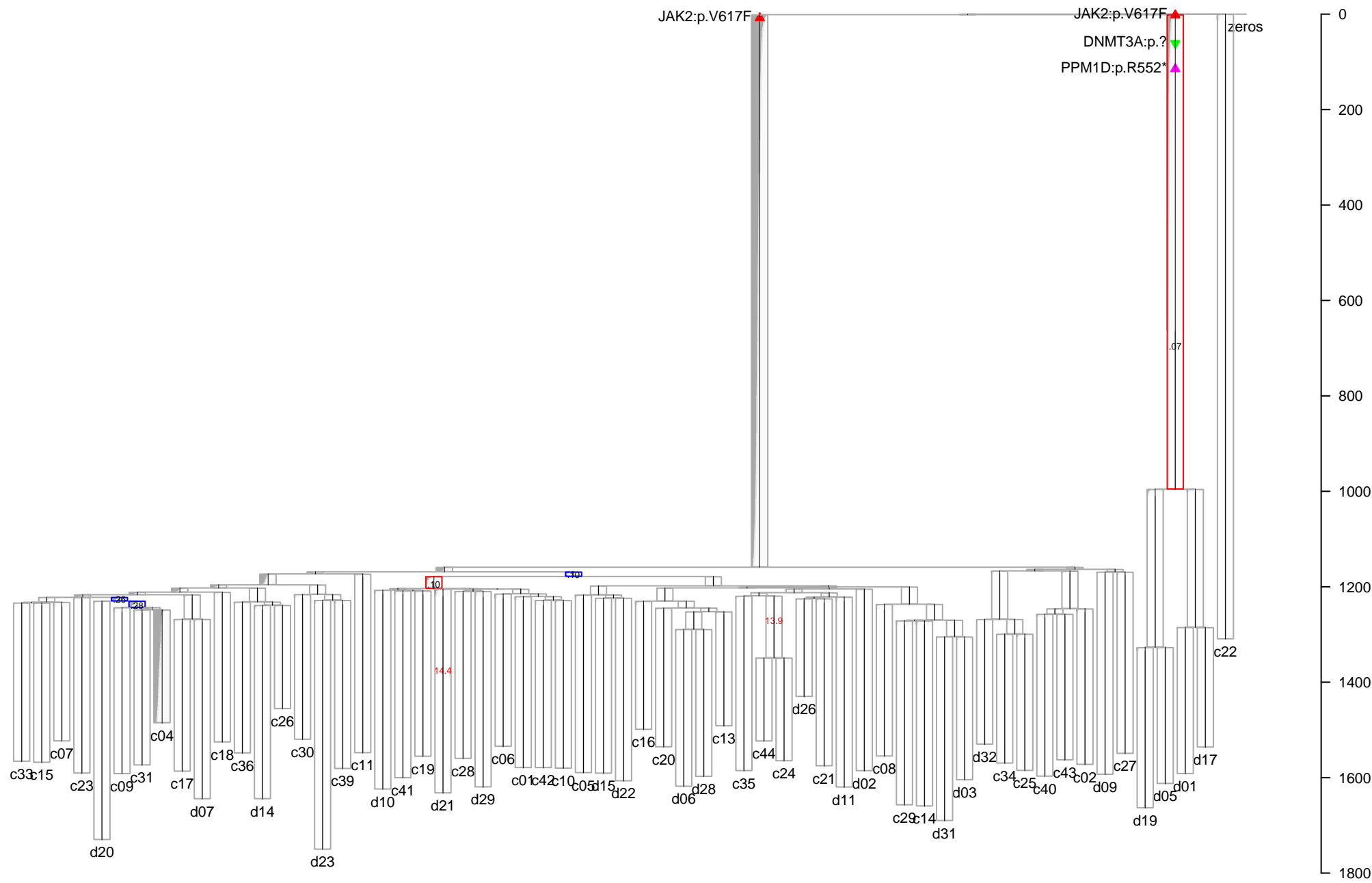


PD4781: Annotated with VAF from c31  
Mean Depth=14.06

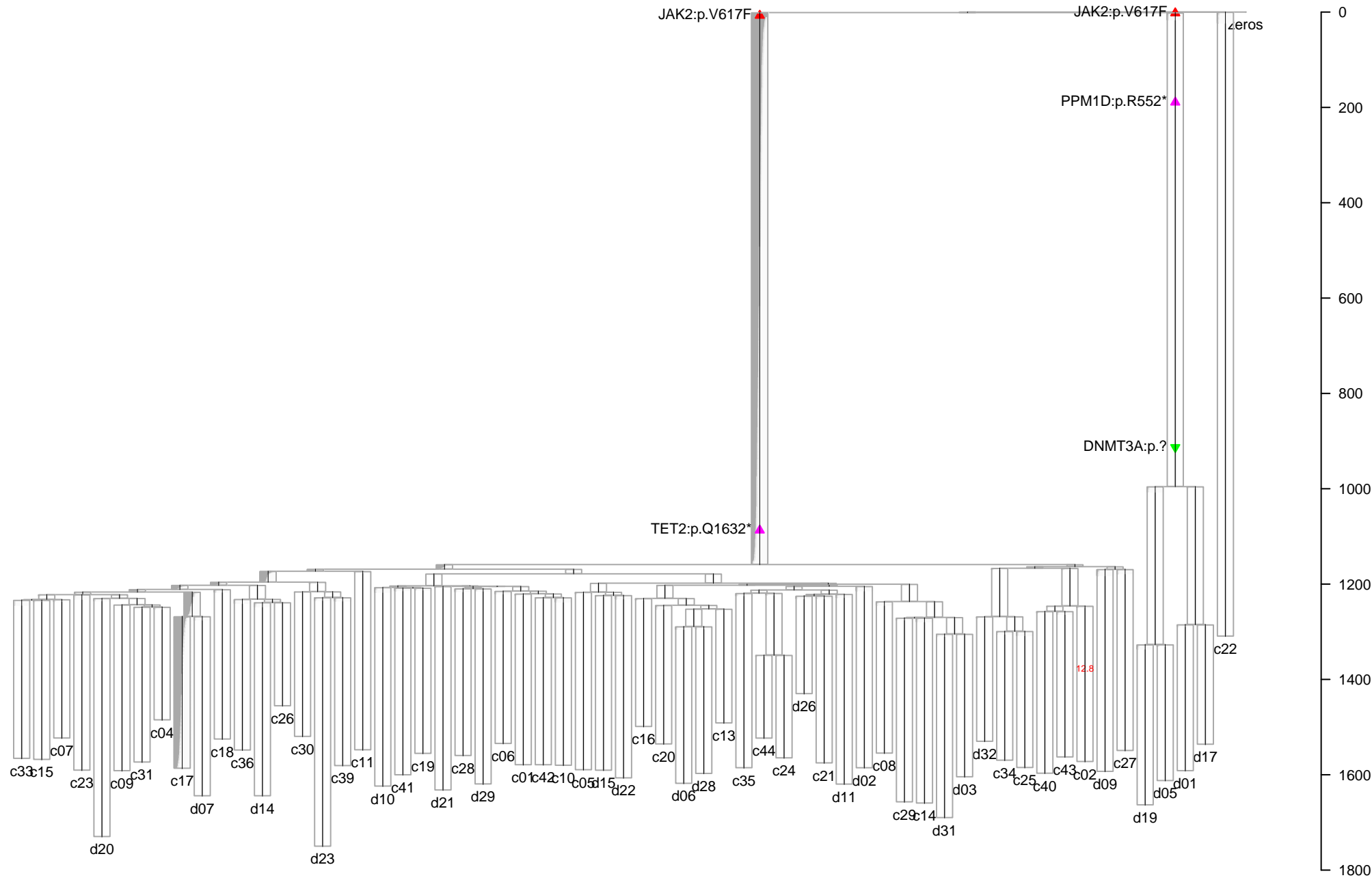




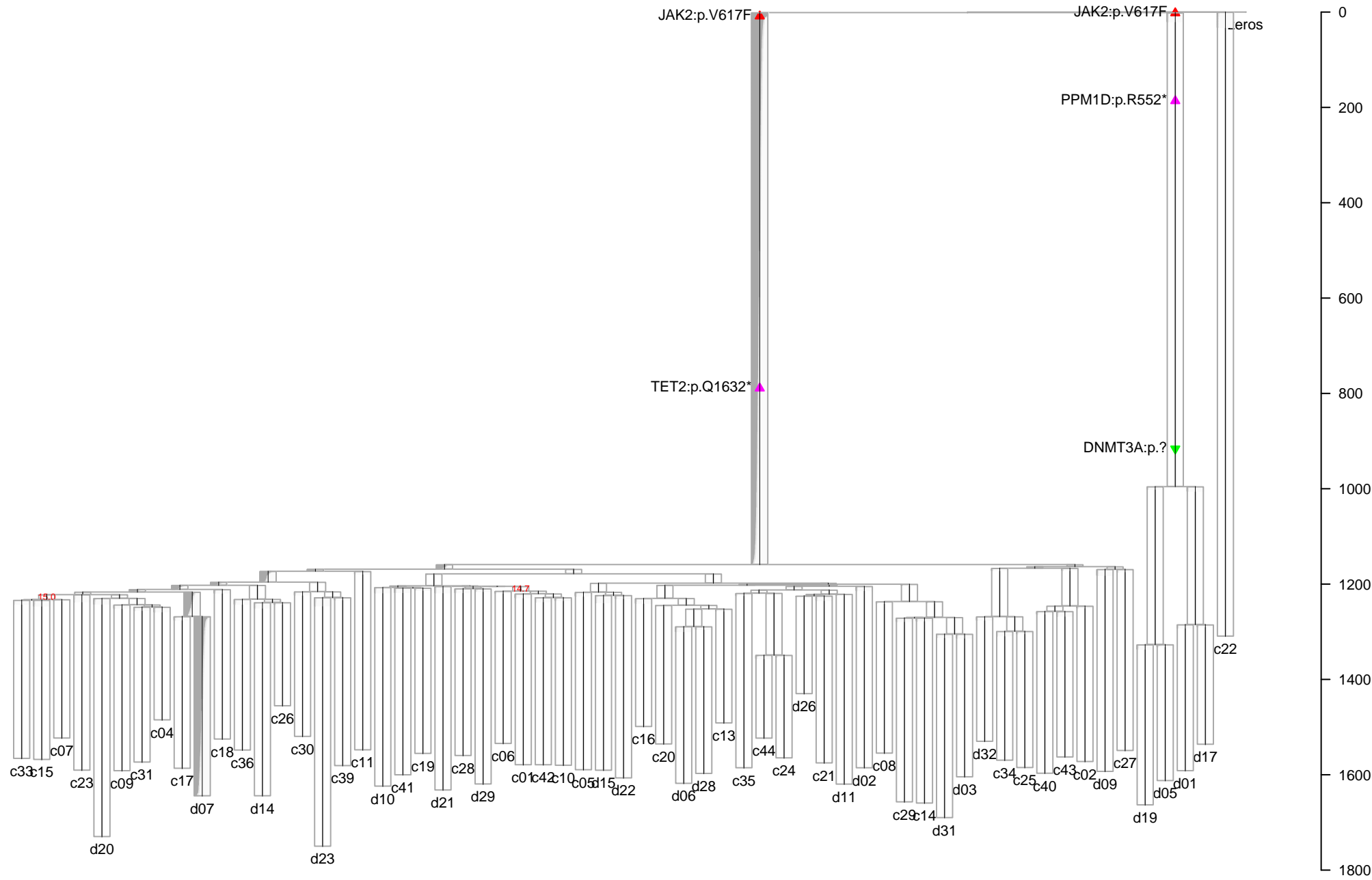
**PD4781: Annotated with VAF from c04**  
**Mean Depth=15.02**



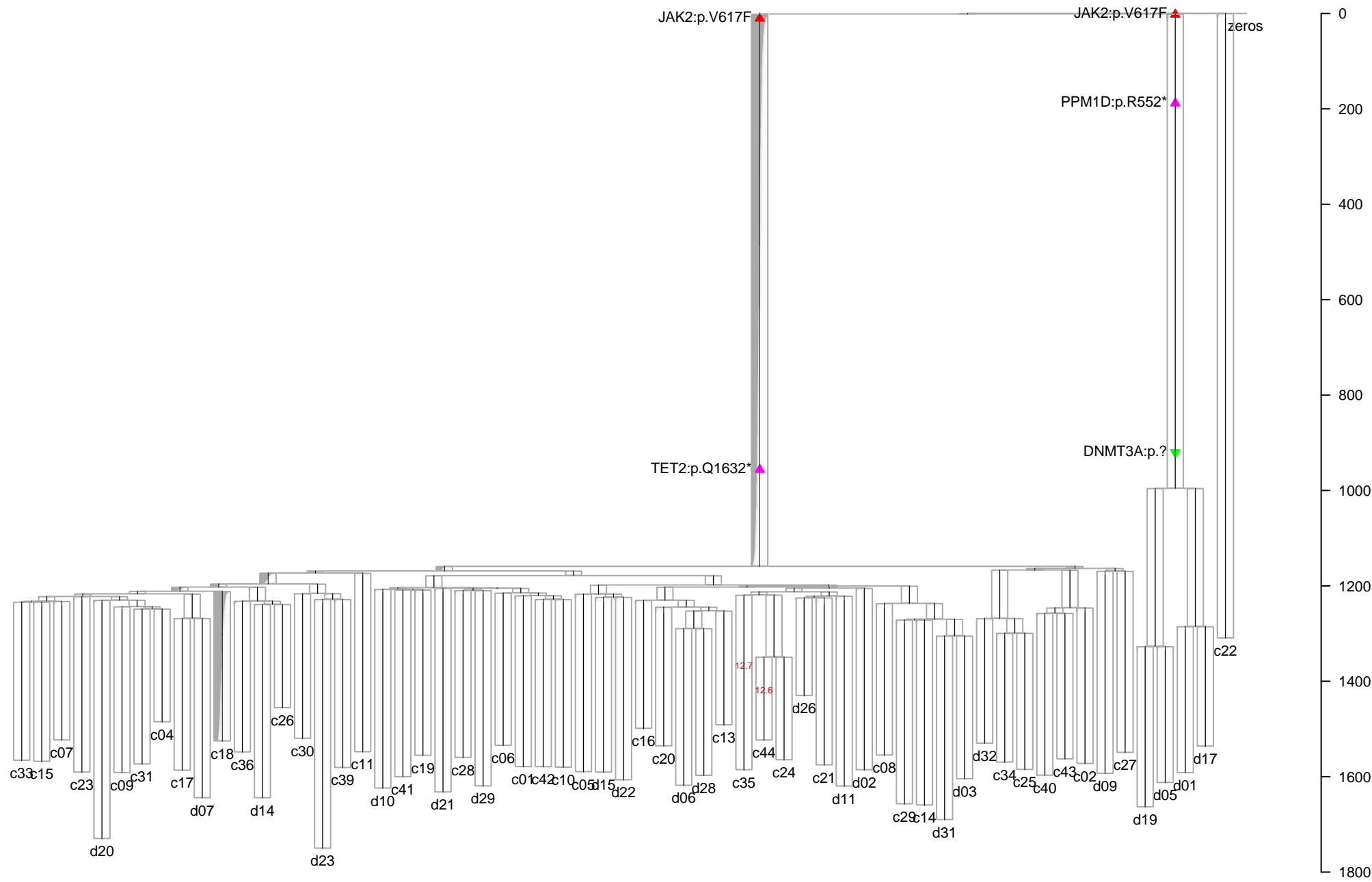
PD4781: Annotated with VAF from c17  
Mean Depth=13.46



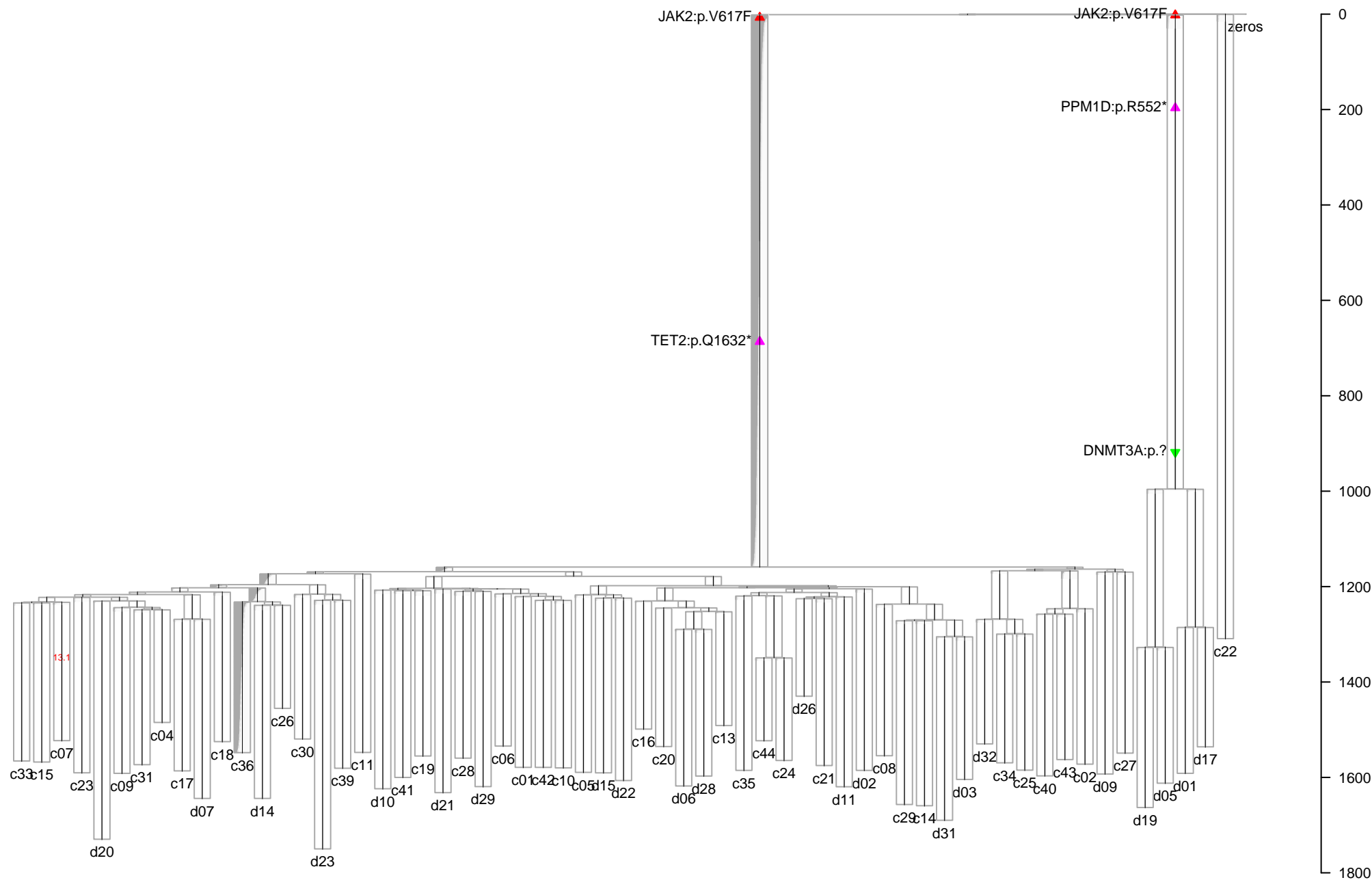
PD4781: Annotated with VAF from d07  
Mean Depth=19.17



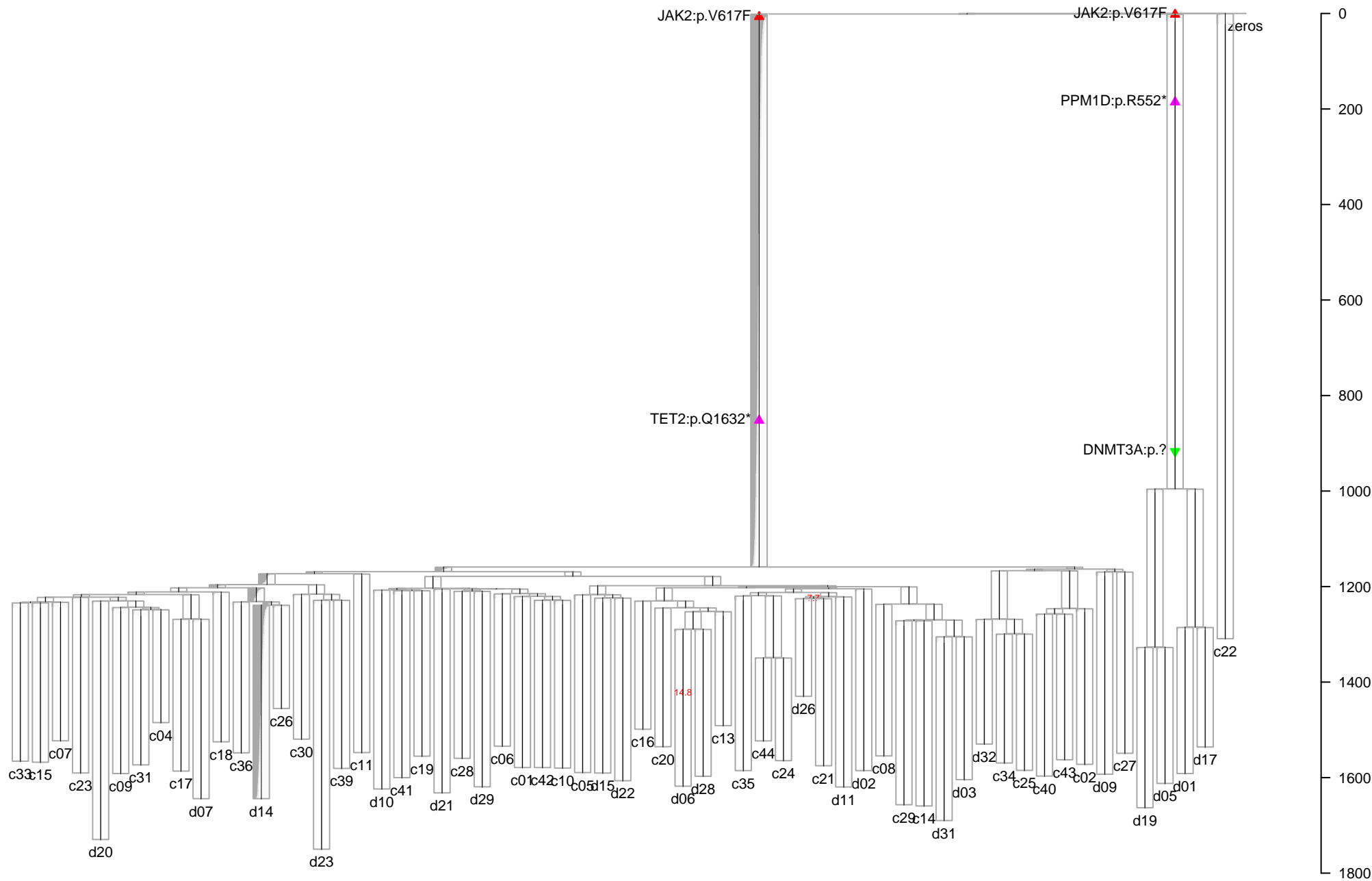
PD4781: Annotated with VAF from c18  
Mean Depth=13.38



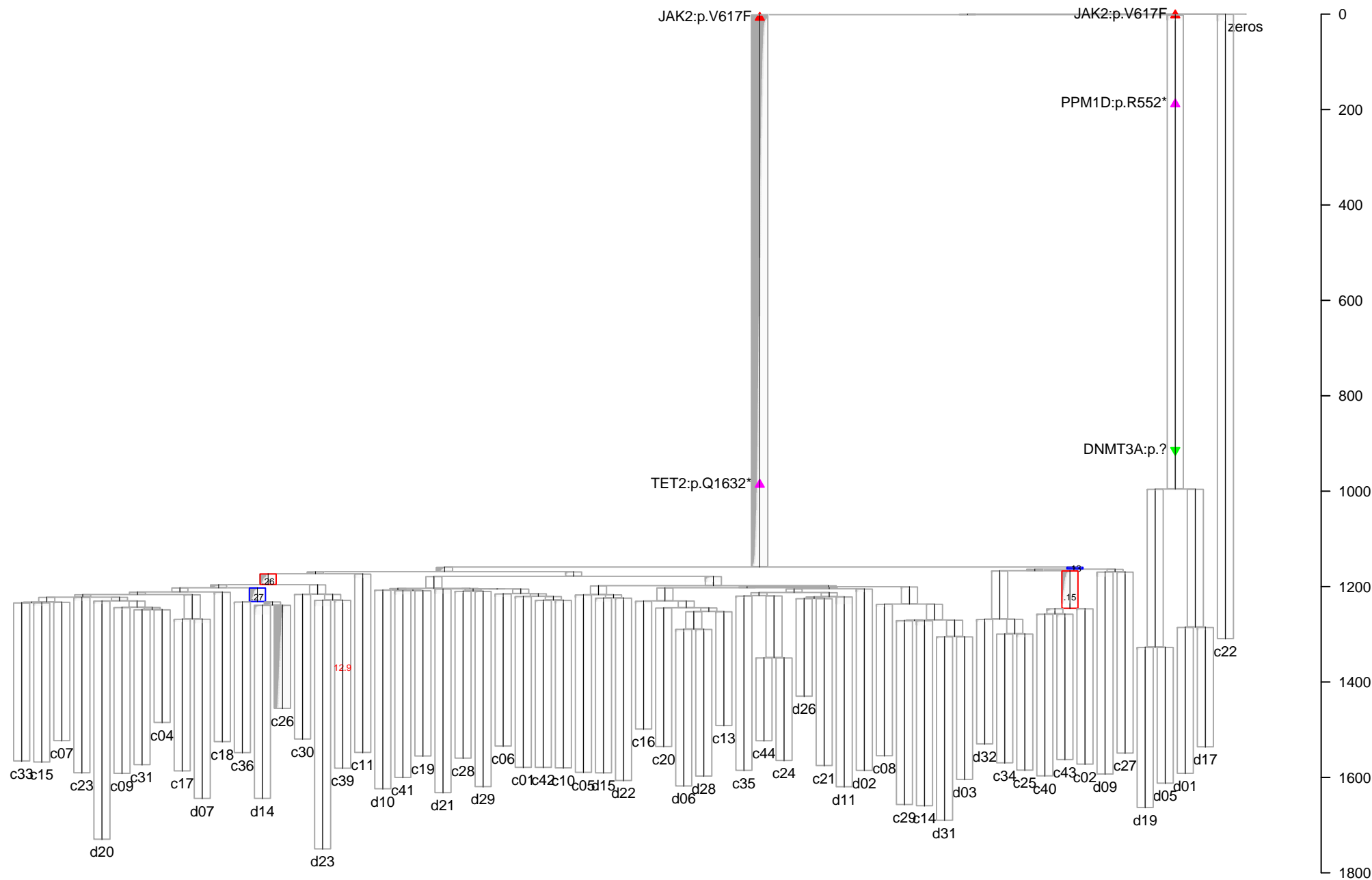
PD4781: Annotated with VAF from c36  
Mean Depth=13.91



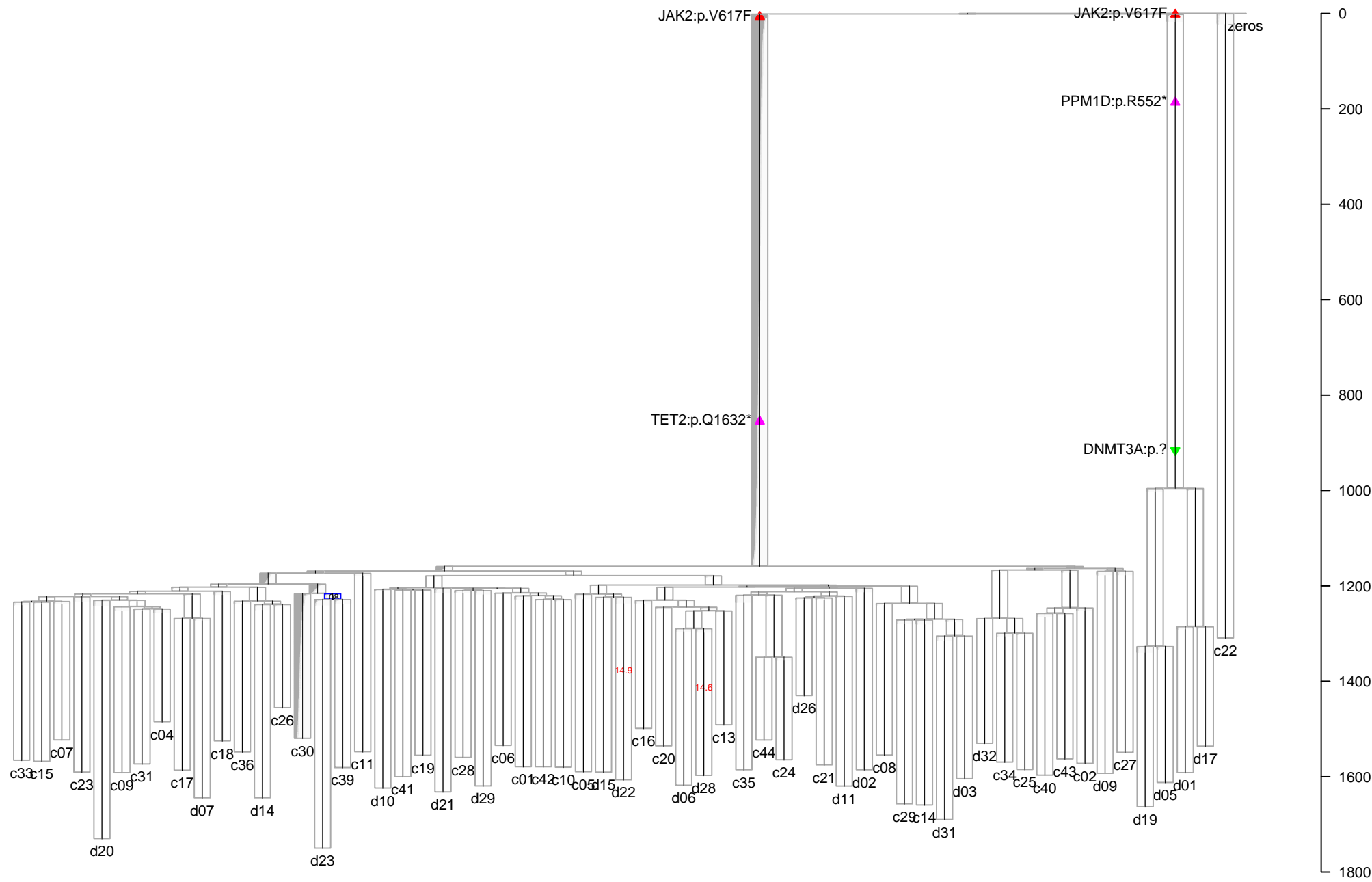
**PD4781: Annotated with VAF from d14**  
**Mean Depth=15.45**



**PD4781: Annotated with VAF from c26**  
**Mean Depth=13.59**

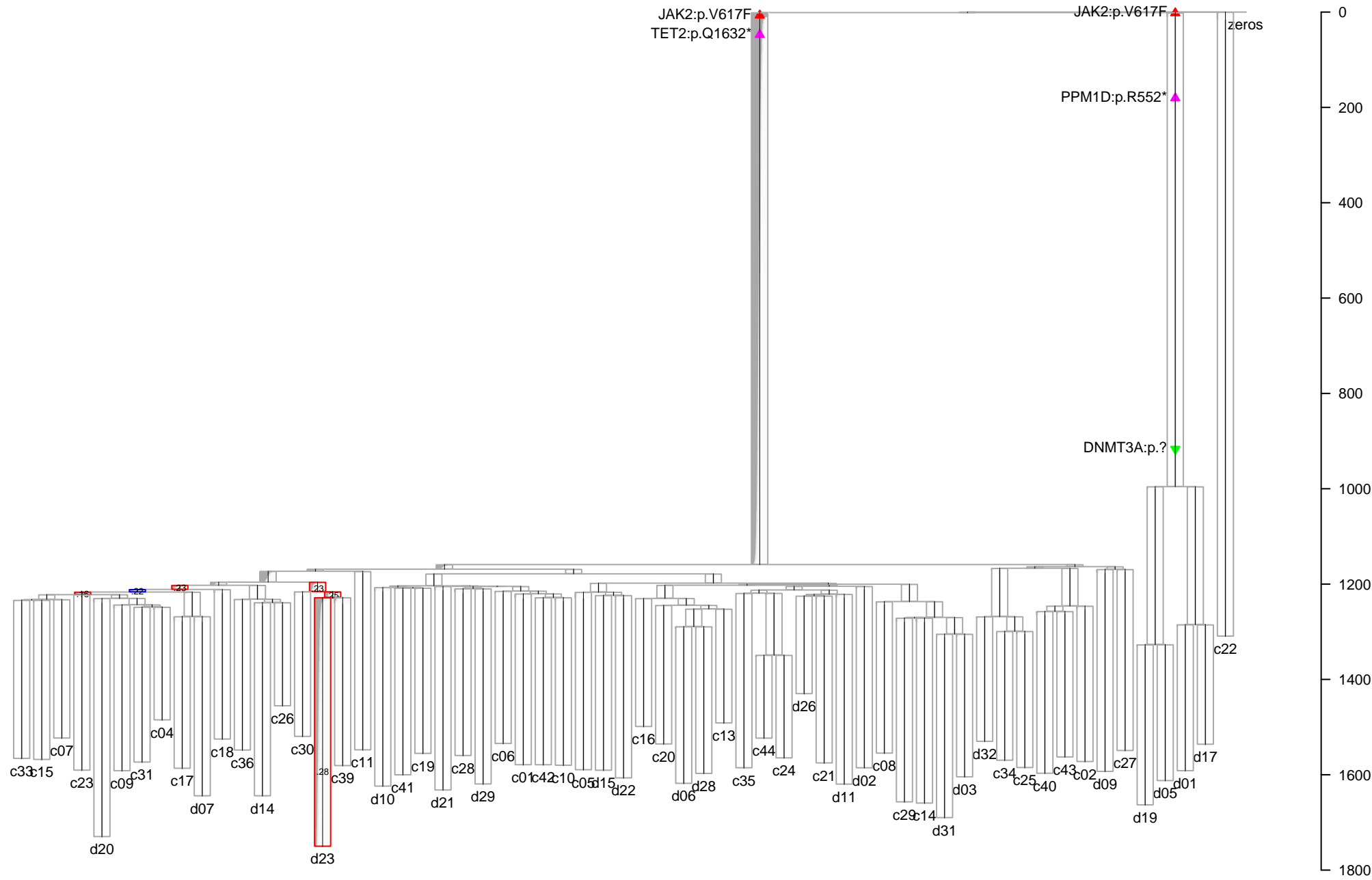


PD4781: Annotated with VAF from c30  
Mean Depth=15.47

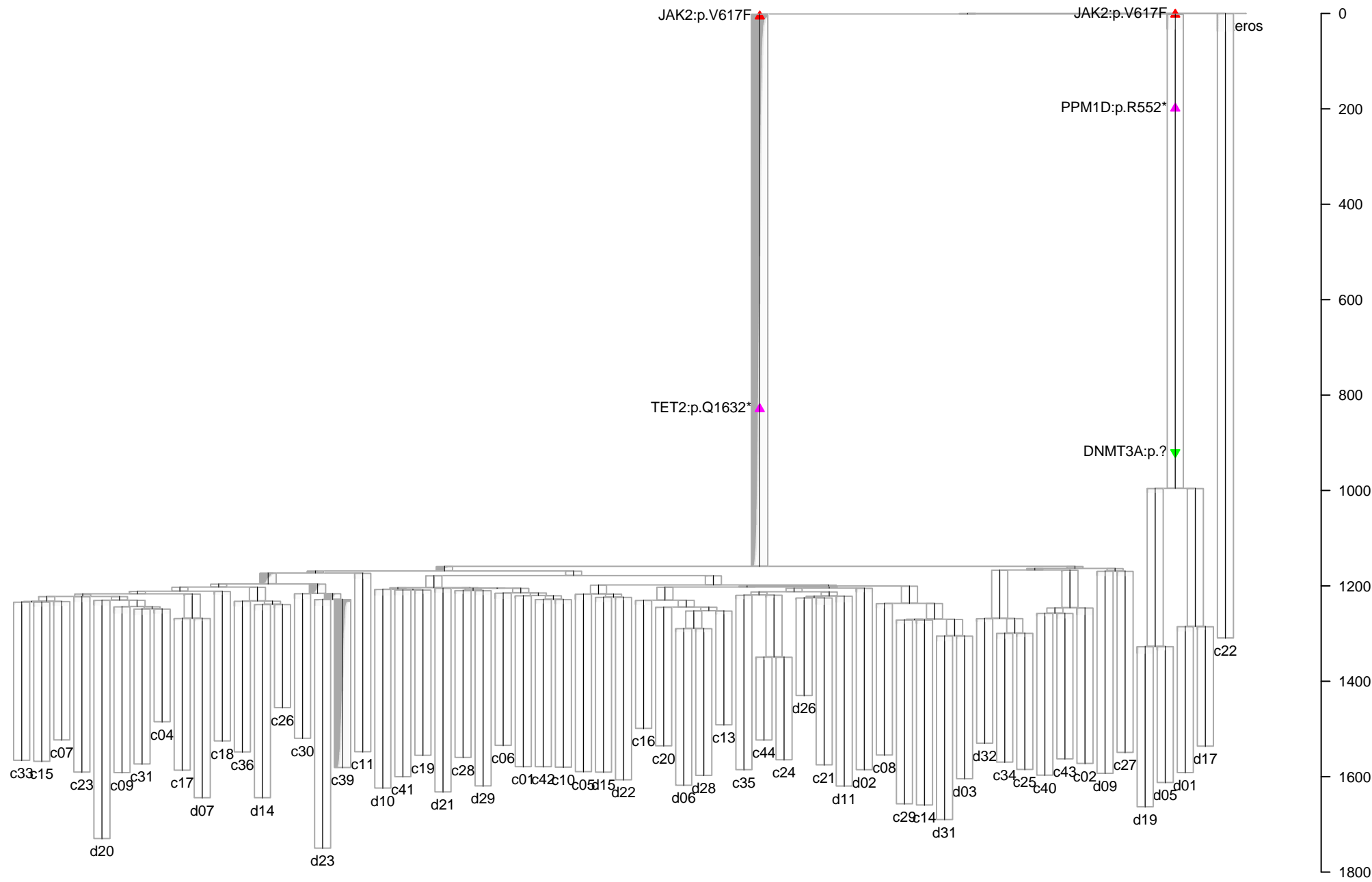




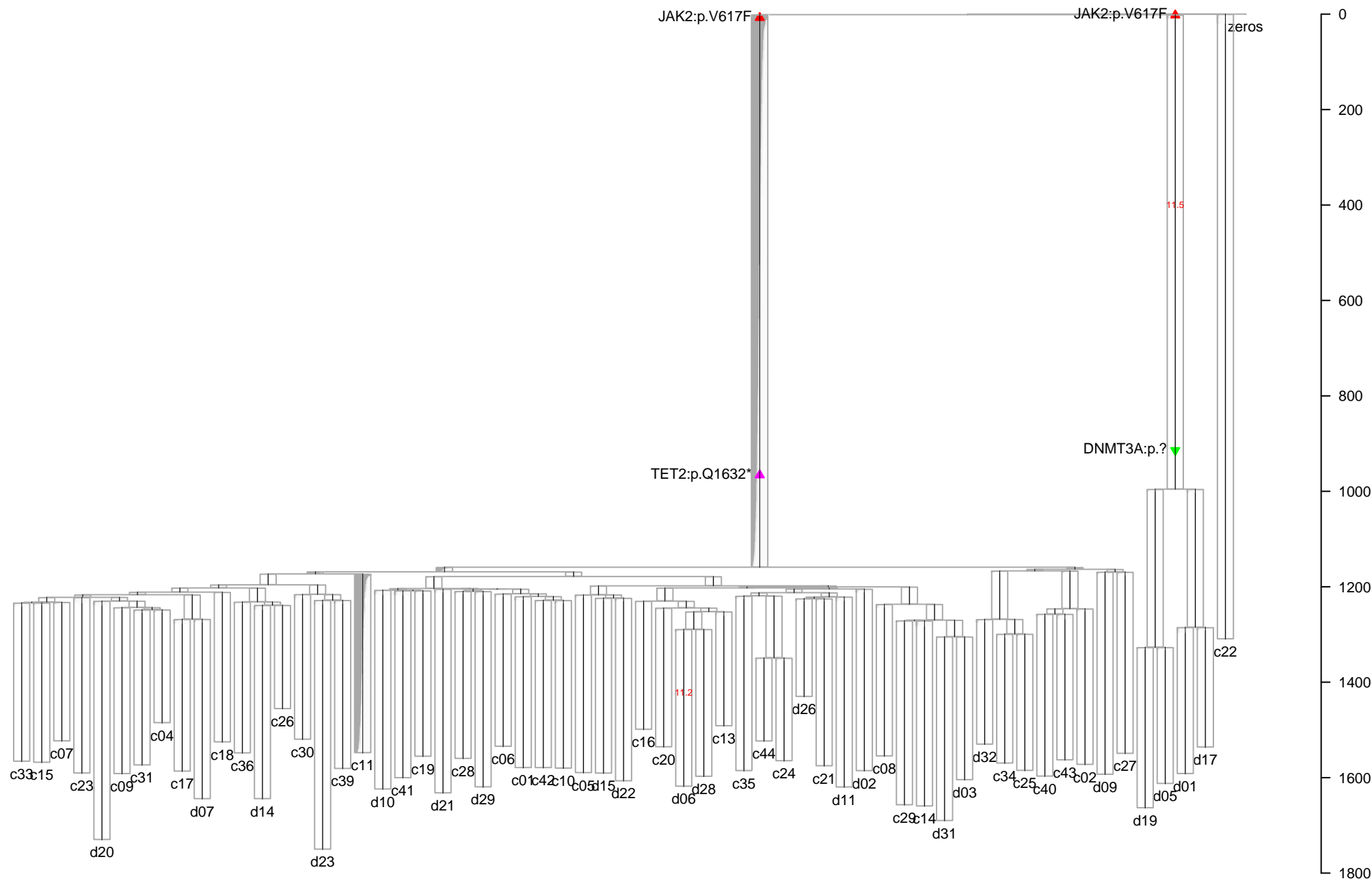
PD4781: Annotated with VAF from d23  
Mean Depth=23.89



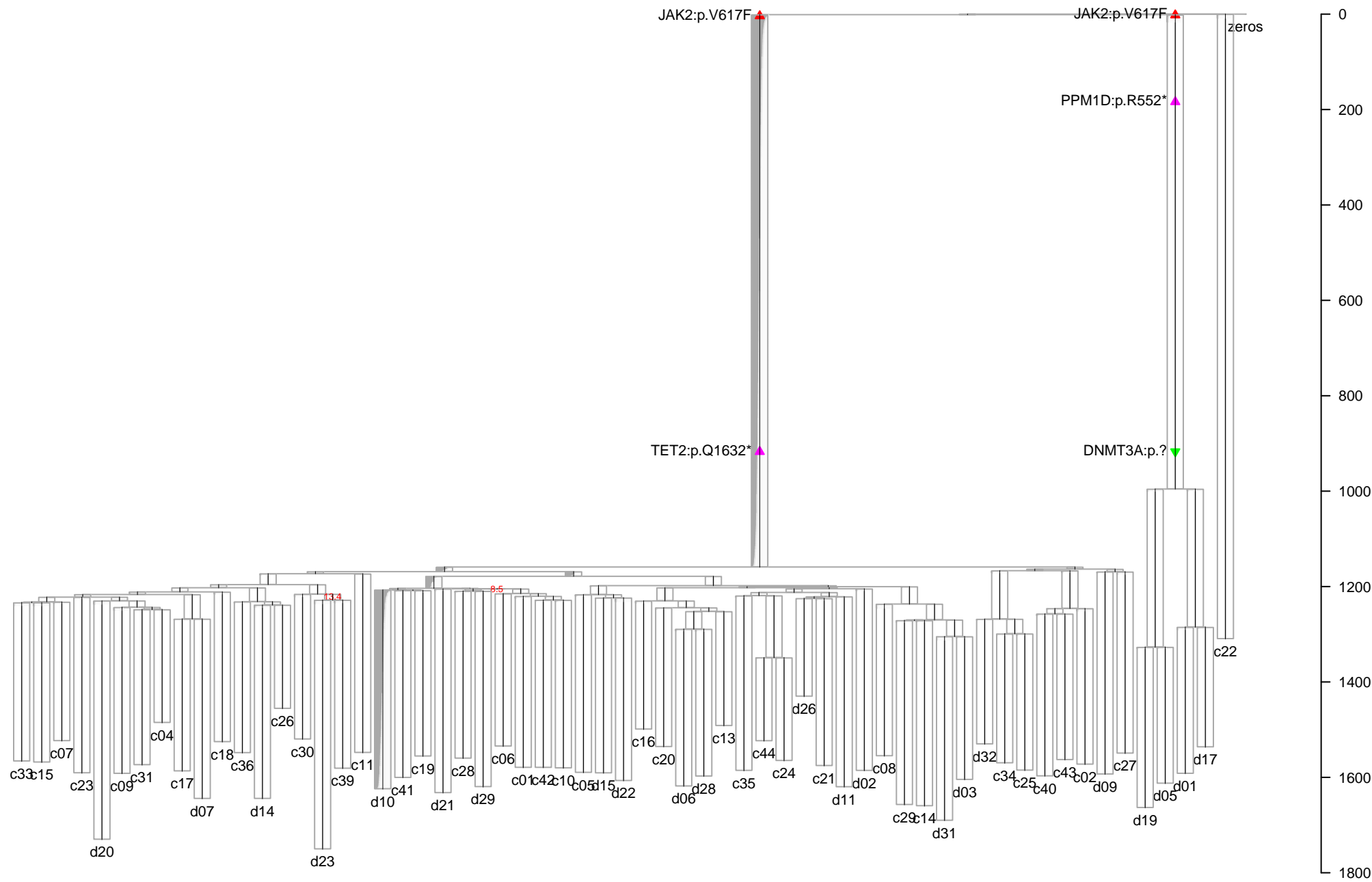
PD4781: Annotated with VAF from c39  
Mean Depth=20.43



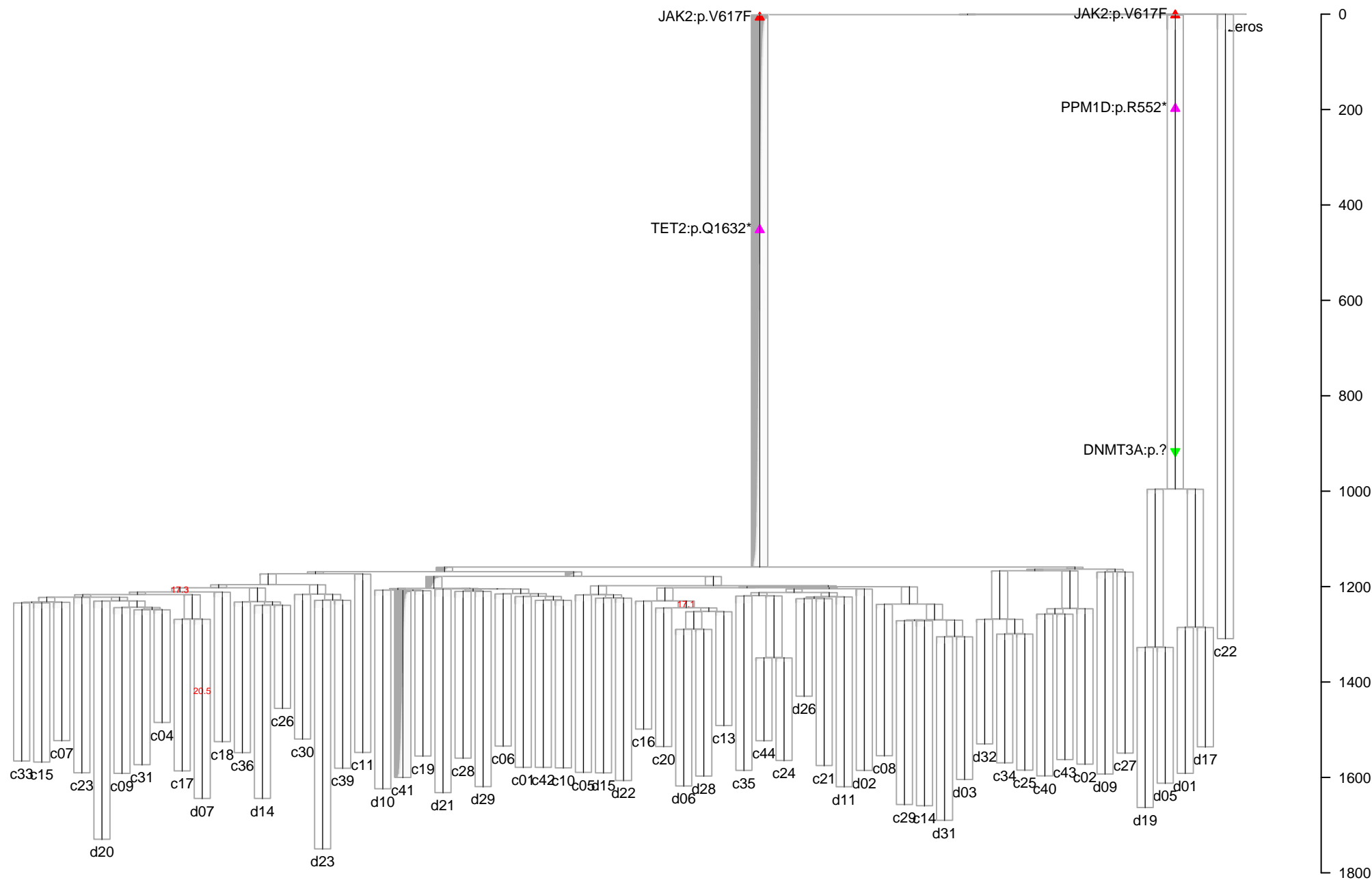
PD4781: Annotated with VAF from c11  
Mean Depth=11.74



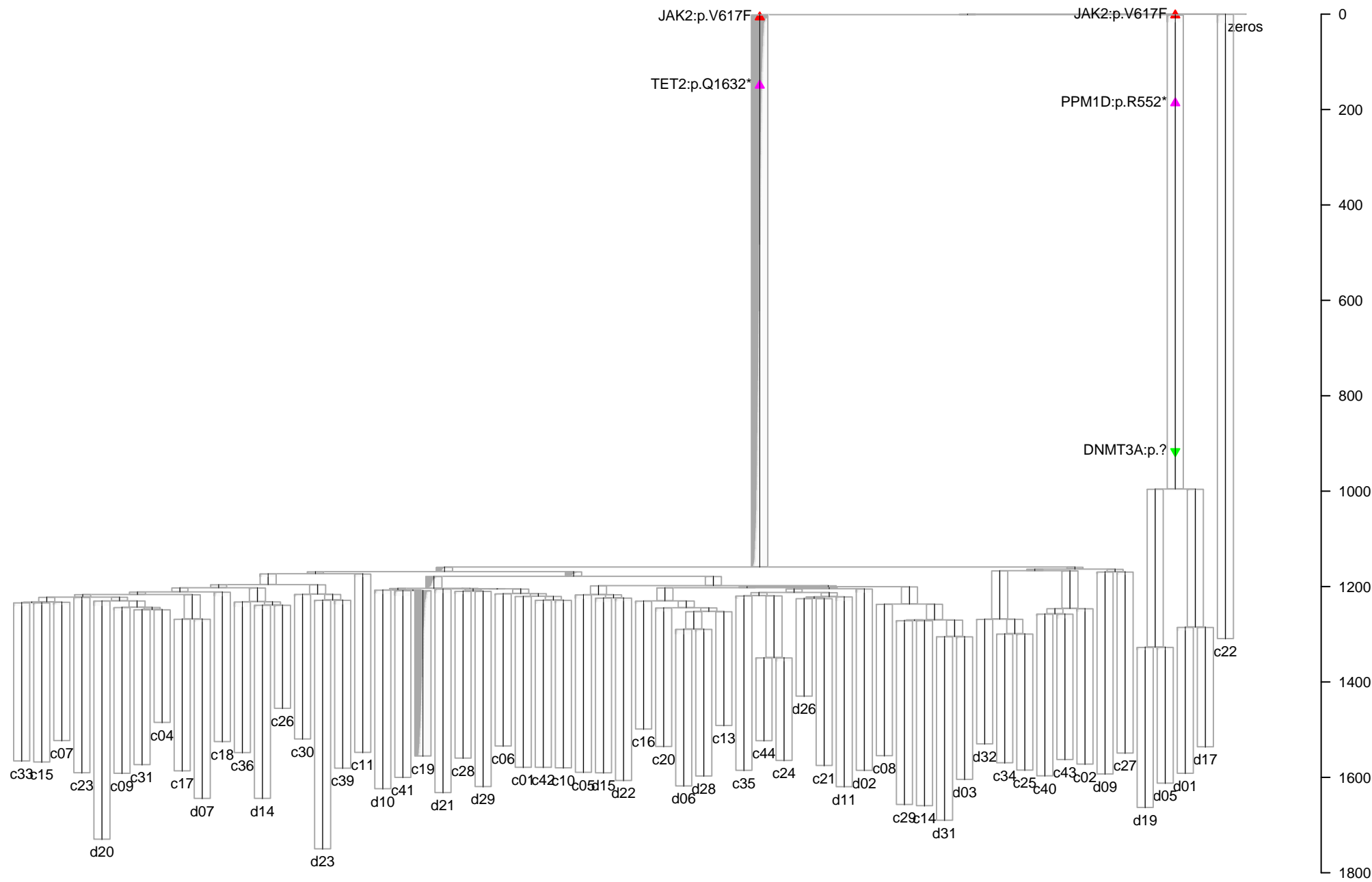
**PD4781: Annotated with VAF from d10**  
**Mean Depth=16.58**



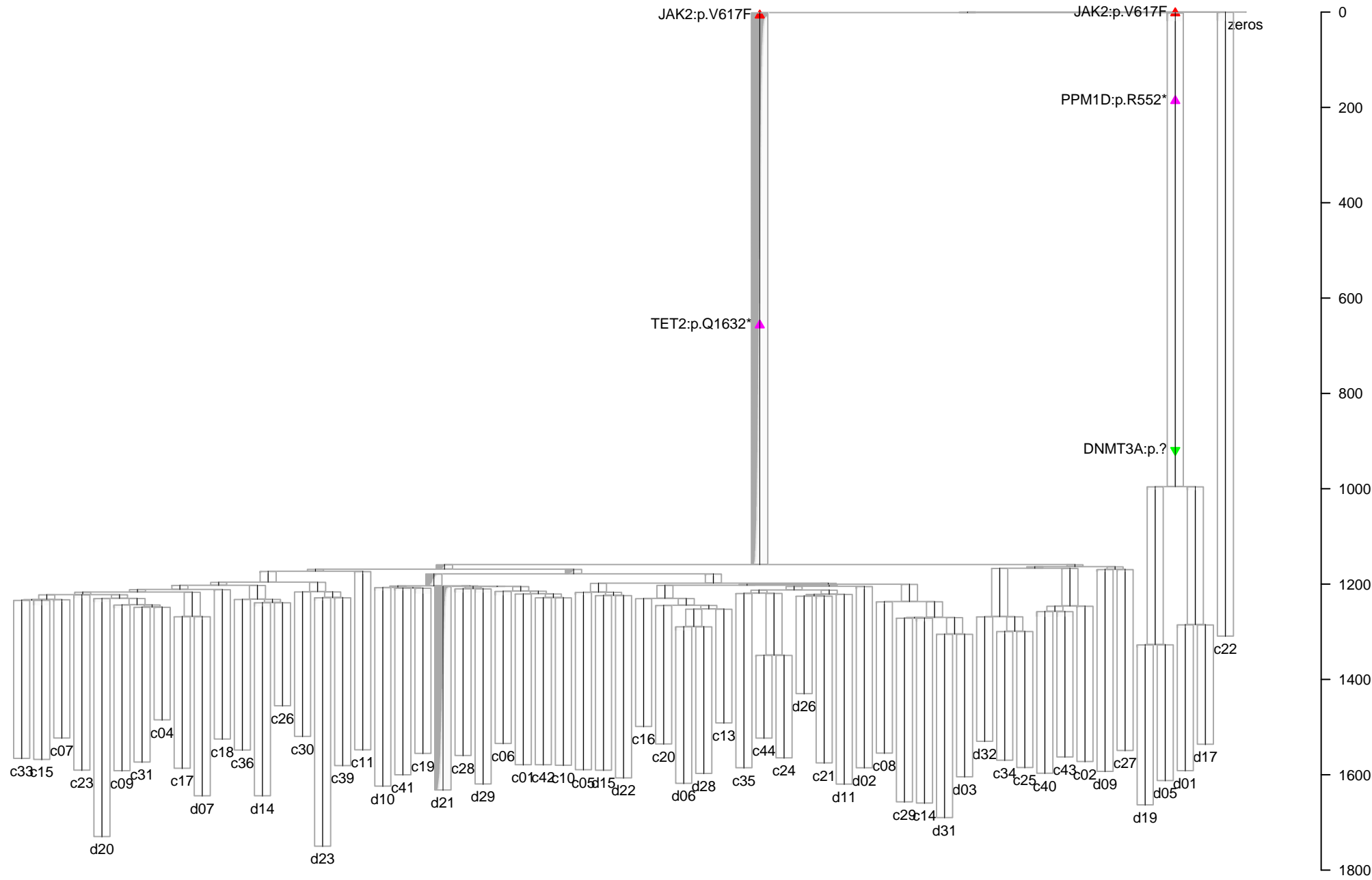
**PD4781: Annotated with VAF from c41**  
**Mean Depth=21.28**



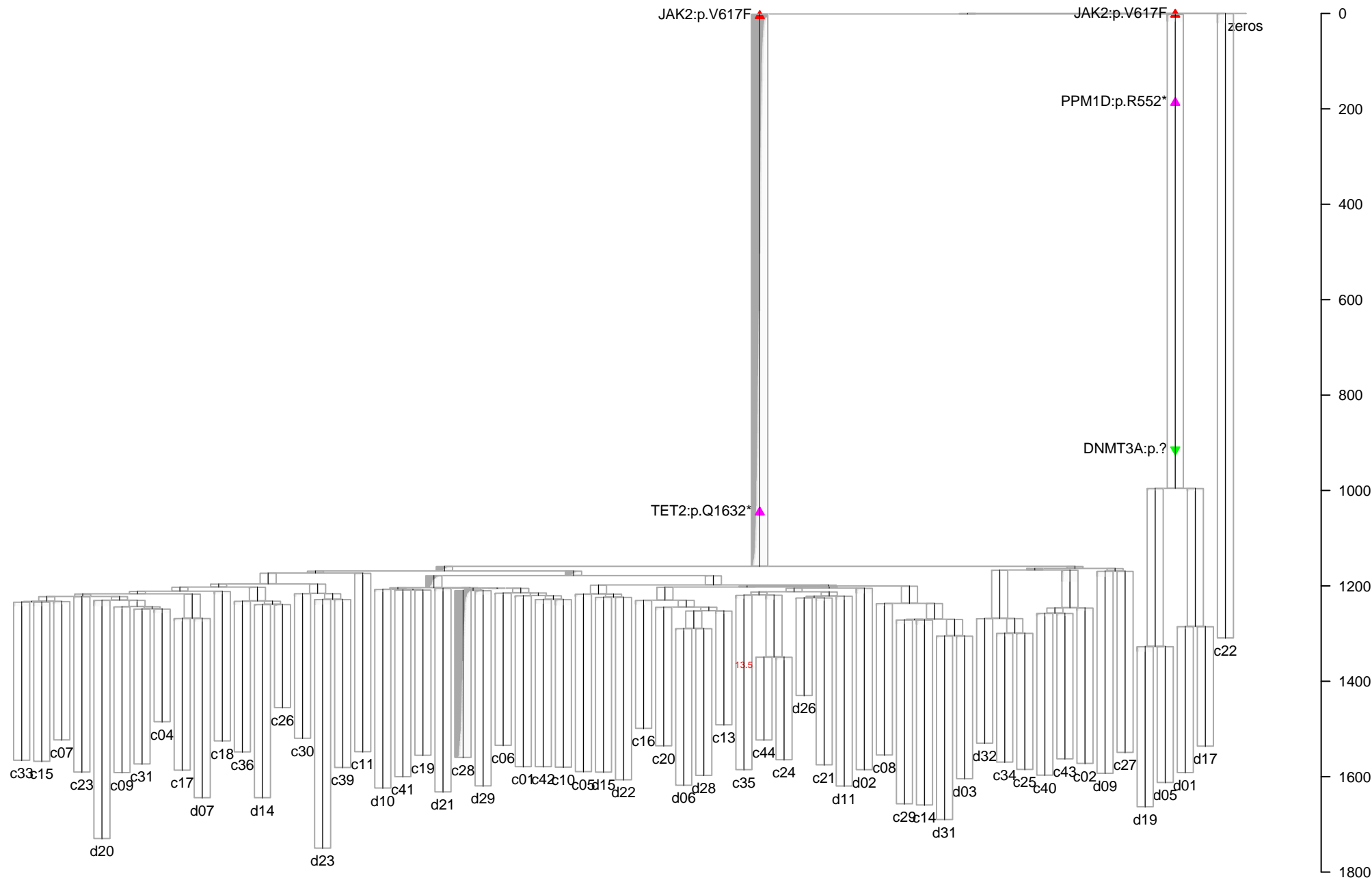
**PD4781: Annotated with VAF from c19**  
**Mean Depth=12.87**



PD4781: Annotated with VAF from d21  
Mean Depth=19.56

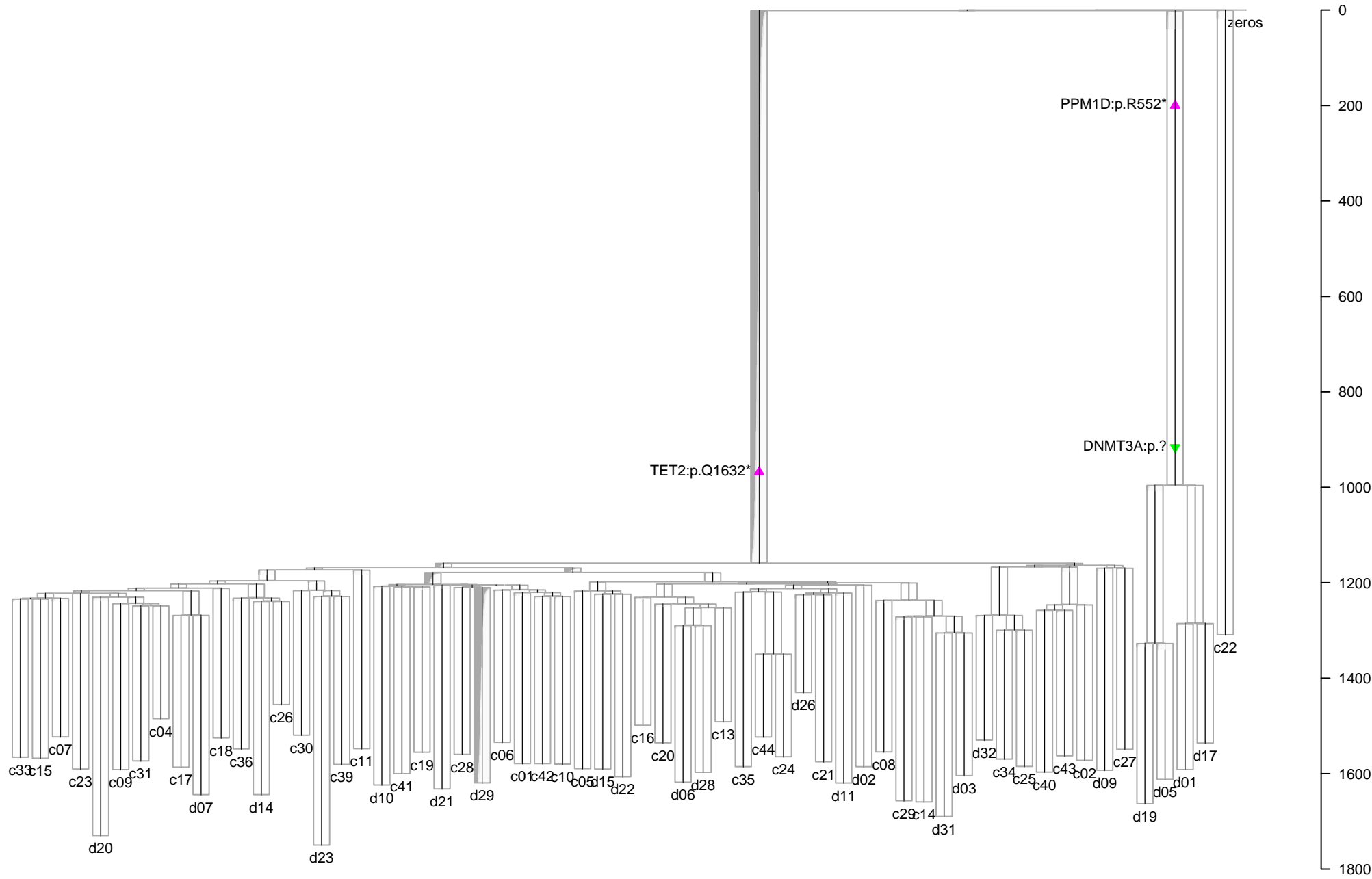


PD4781: Annotated with VAF from c28  
Mean Depth=14.31

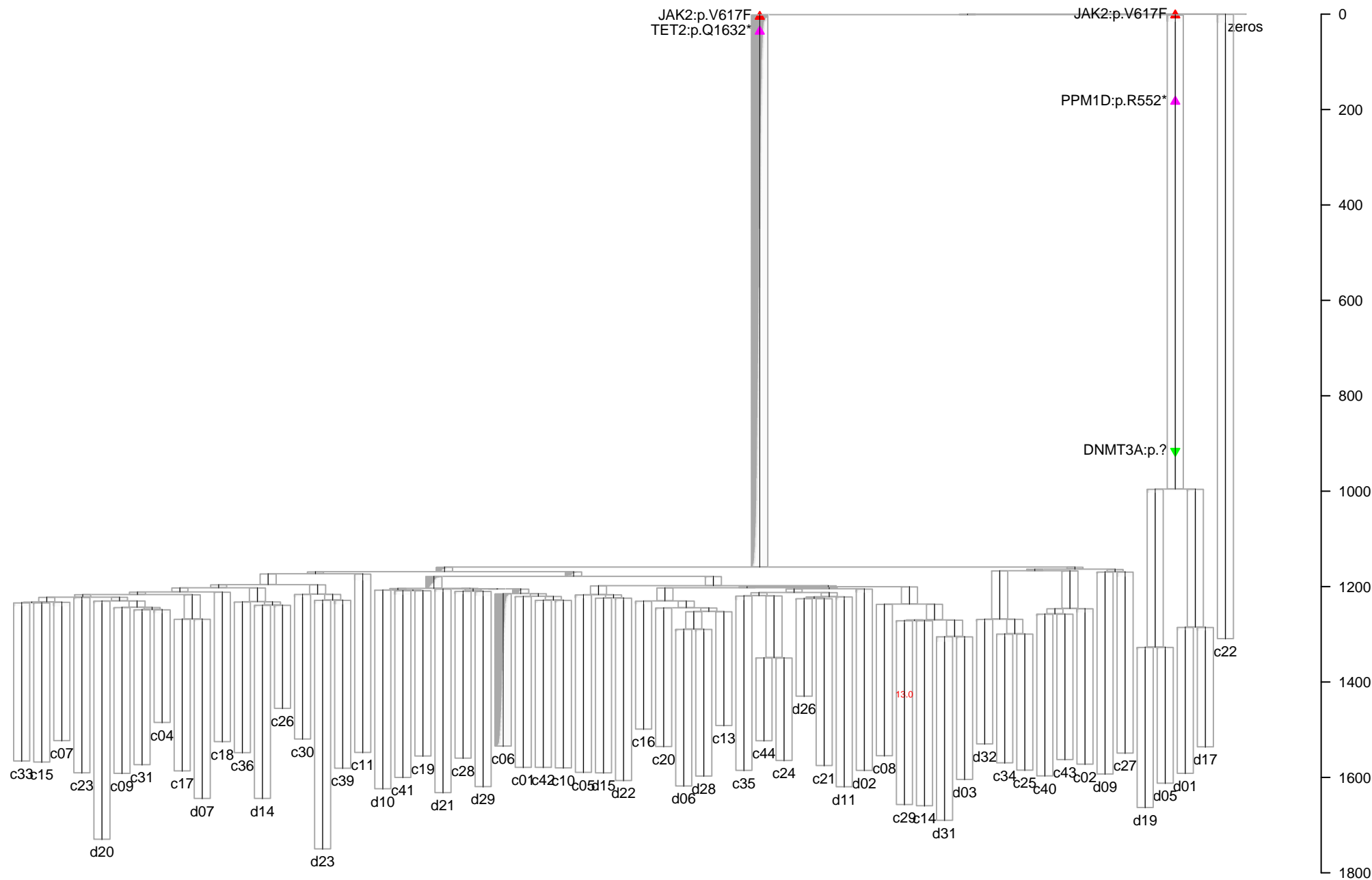




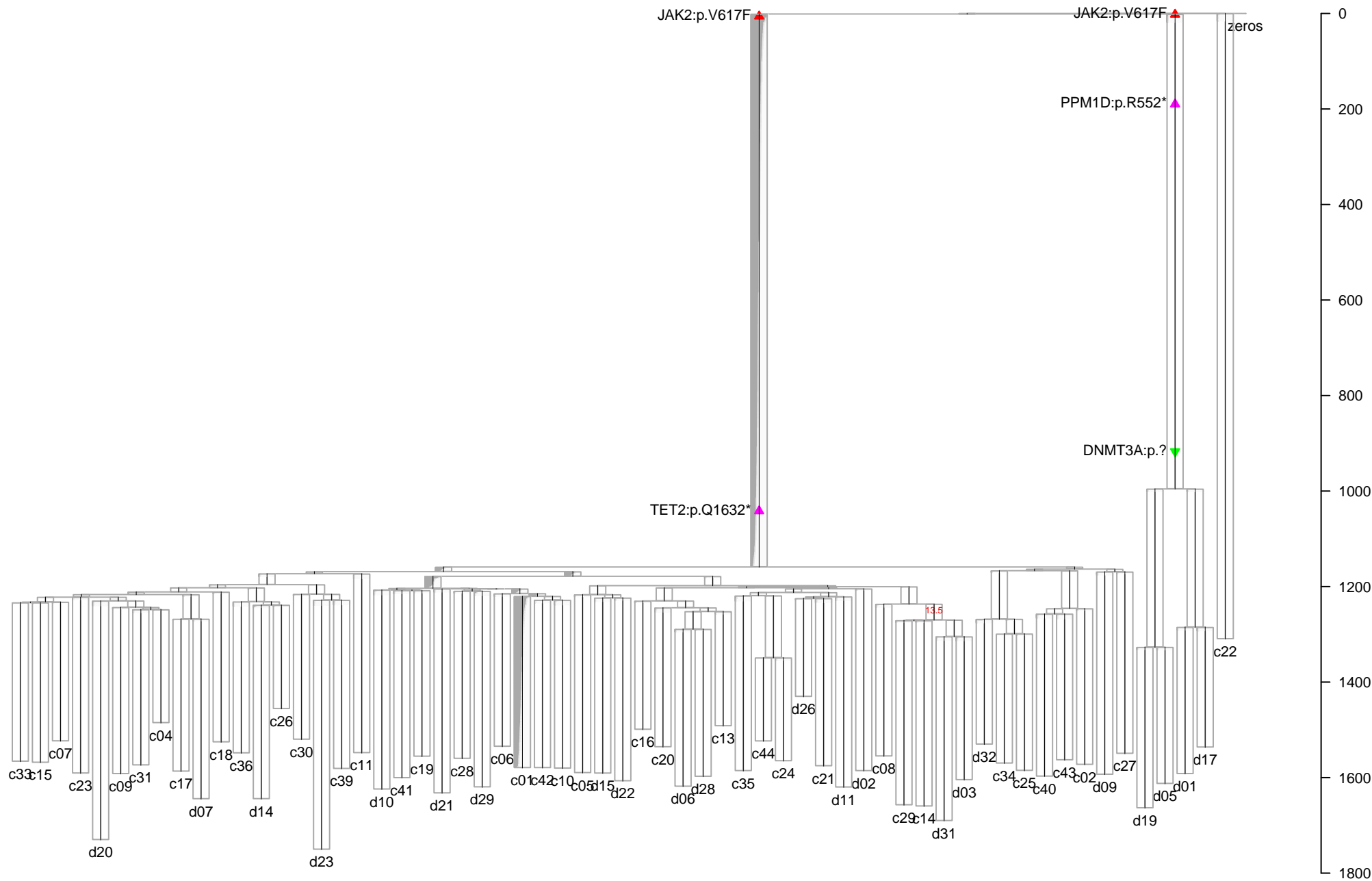
PD4781: Annotated with VAF from d29  
Mean Depth=12.90



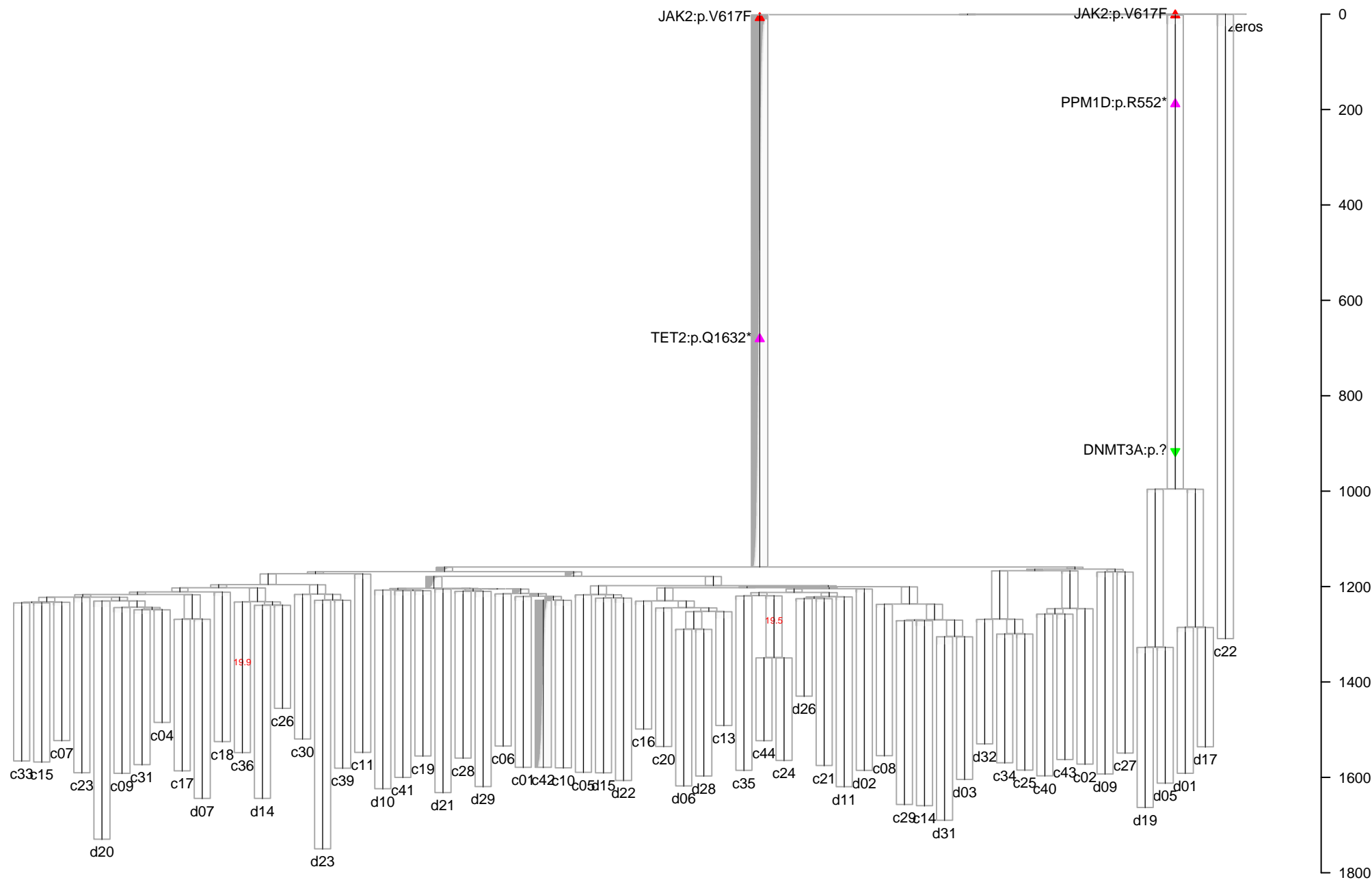
**PD4781: Annotated with VAF from c06**  
**Mean Depth=13.61**



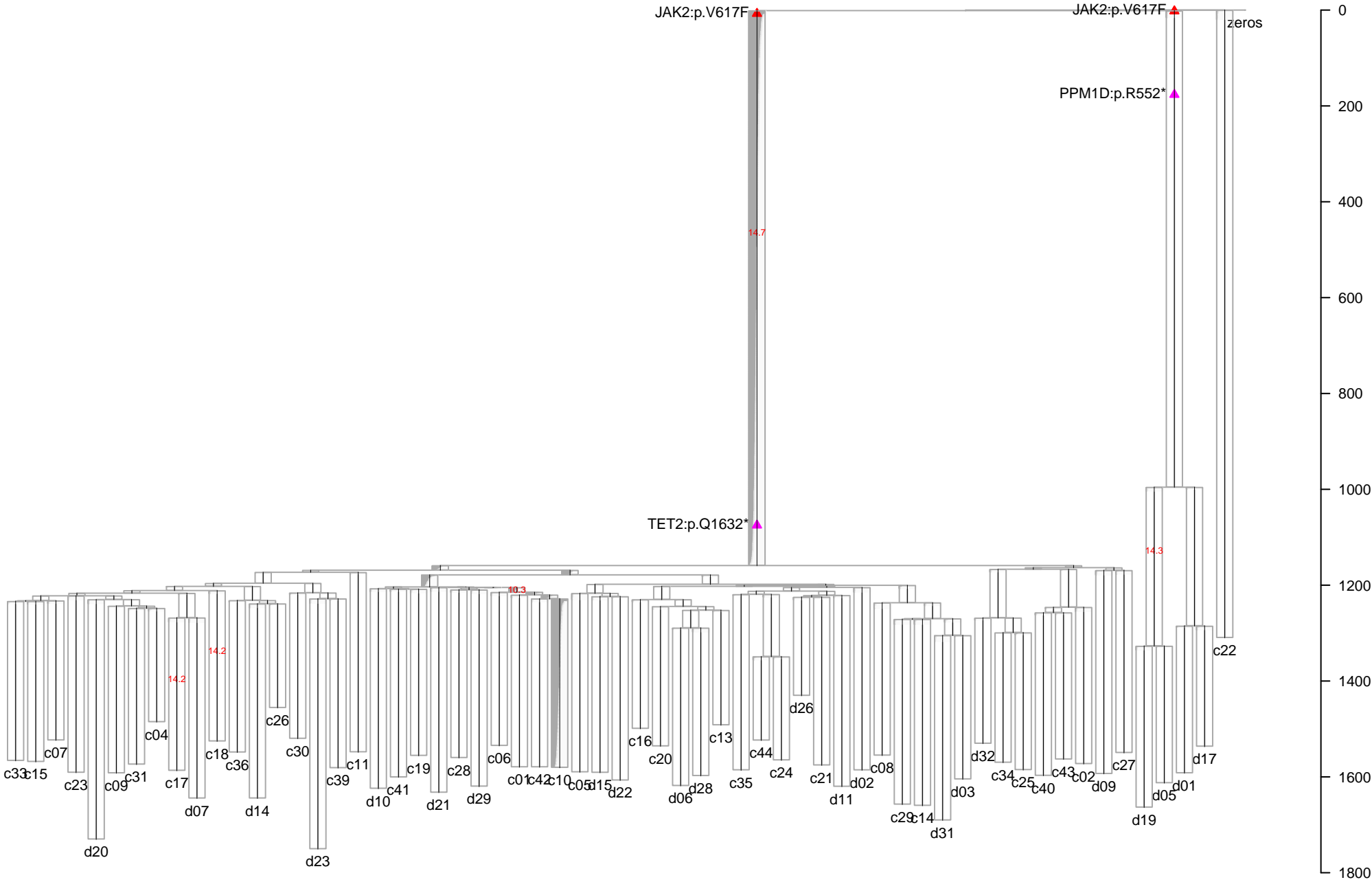
**PD4781: Annotated with VAF from c01**  
**Mean Depth=15.17**



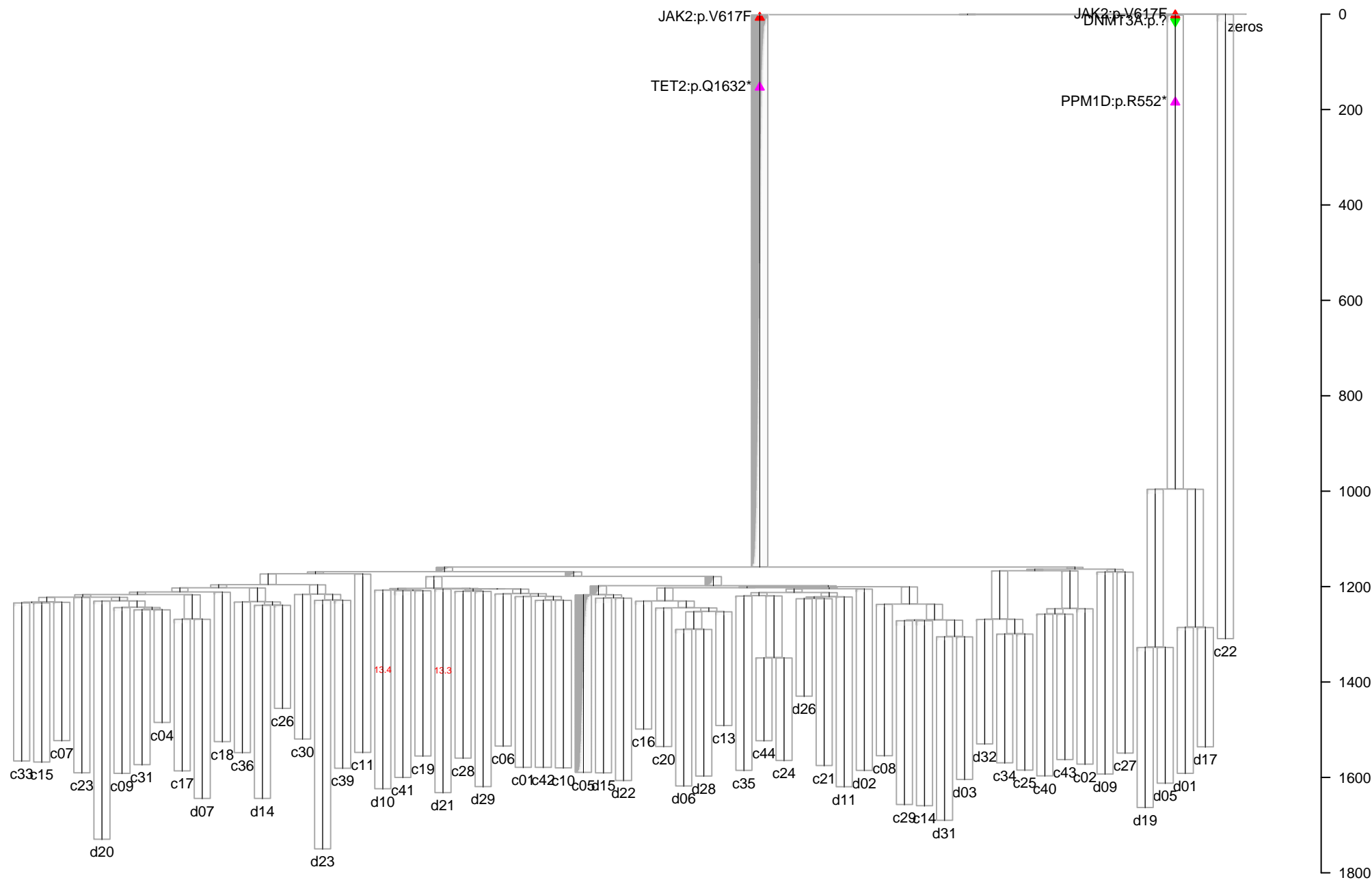
PD4781: Annotated with VAF from c42  
Mean Depth=20.75



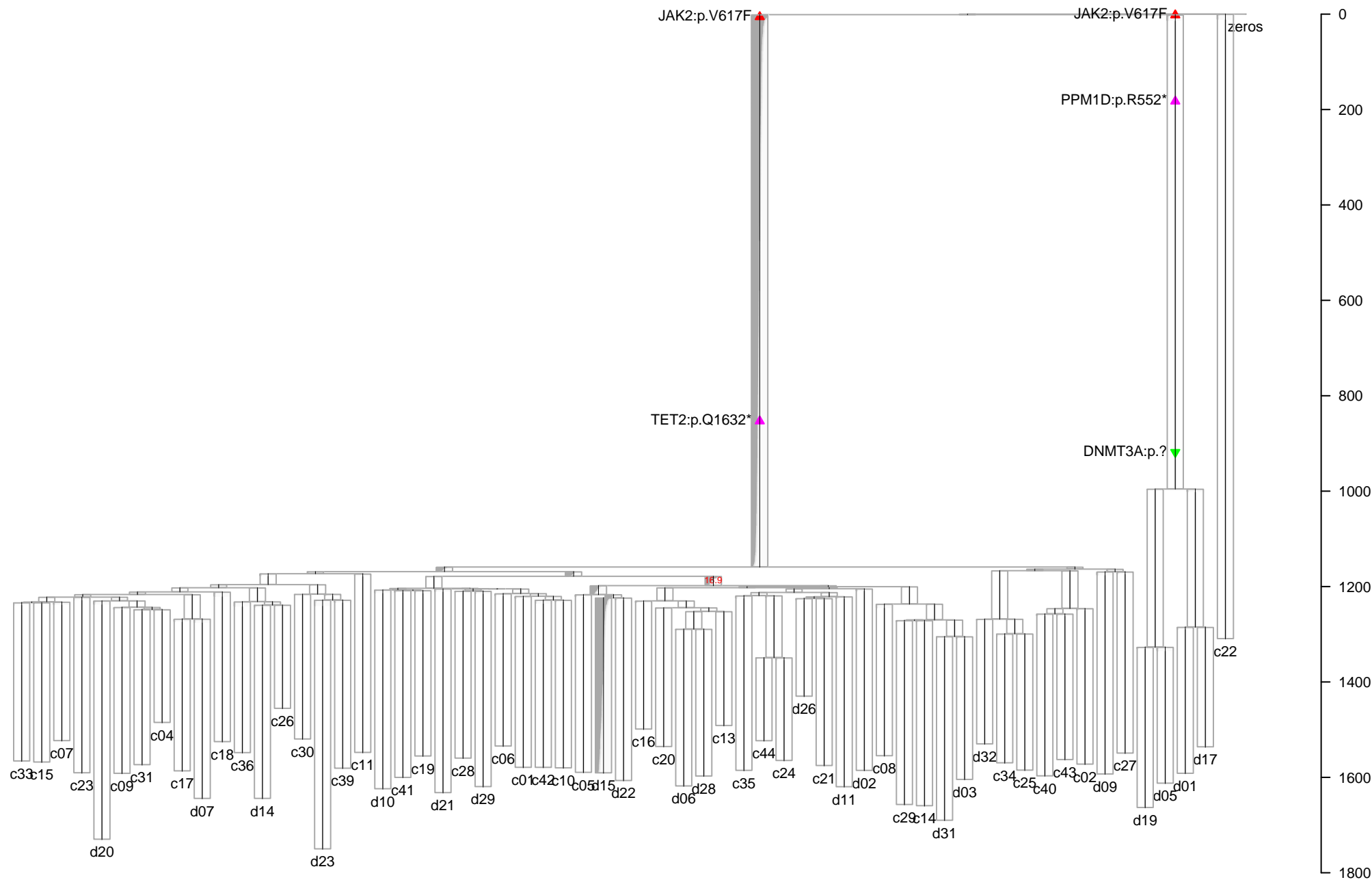
PD4781: Annotated with VAF from c10  
Mean Depth=15.17



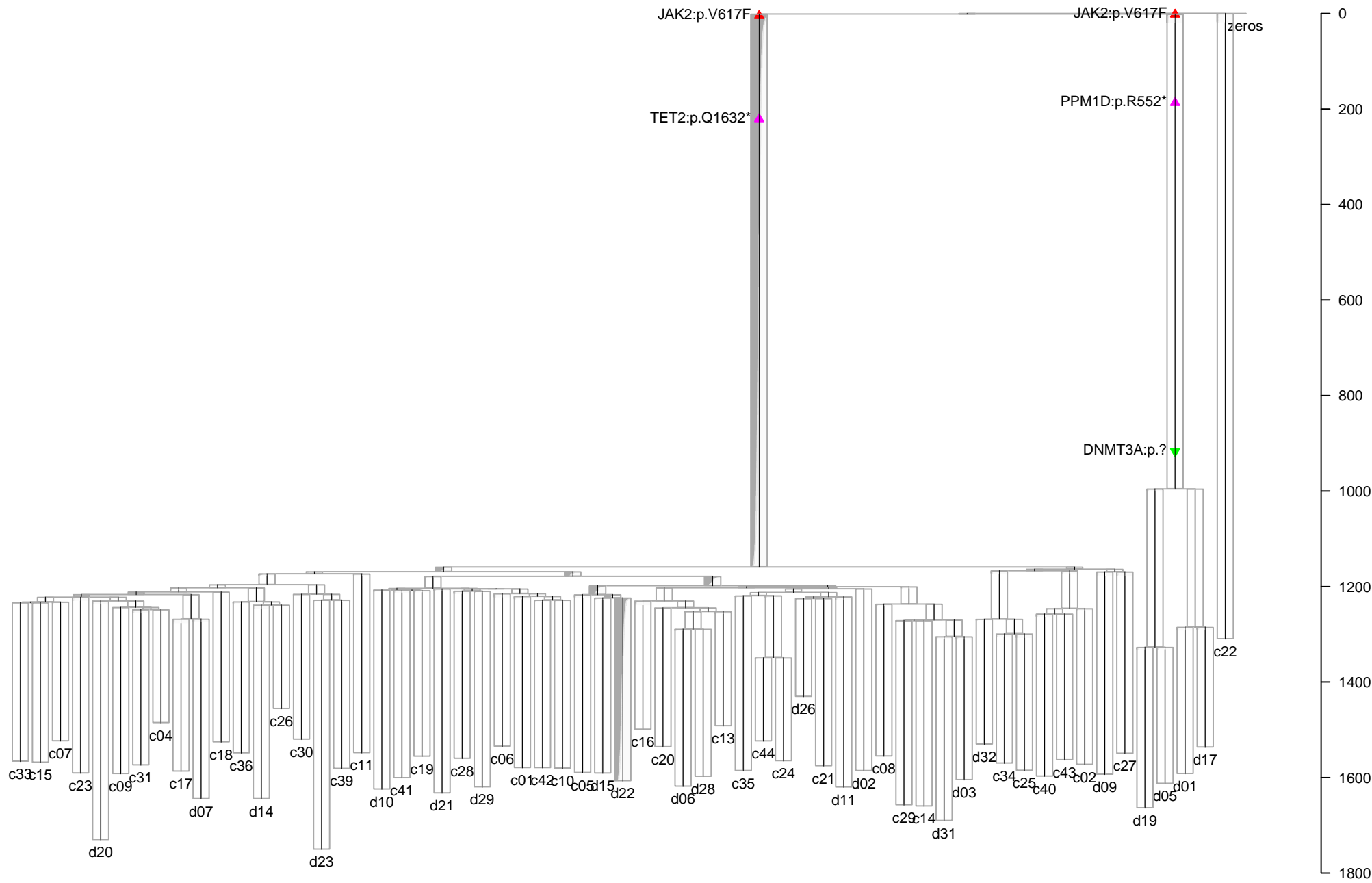
**PD4781: Annotated with VAF from c05**  
**Mean Depth=13.97**



**PD4781: Annotated with VAF from d15**  
**Mean Depth=20.30**

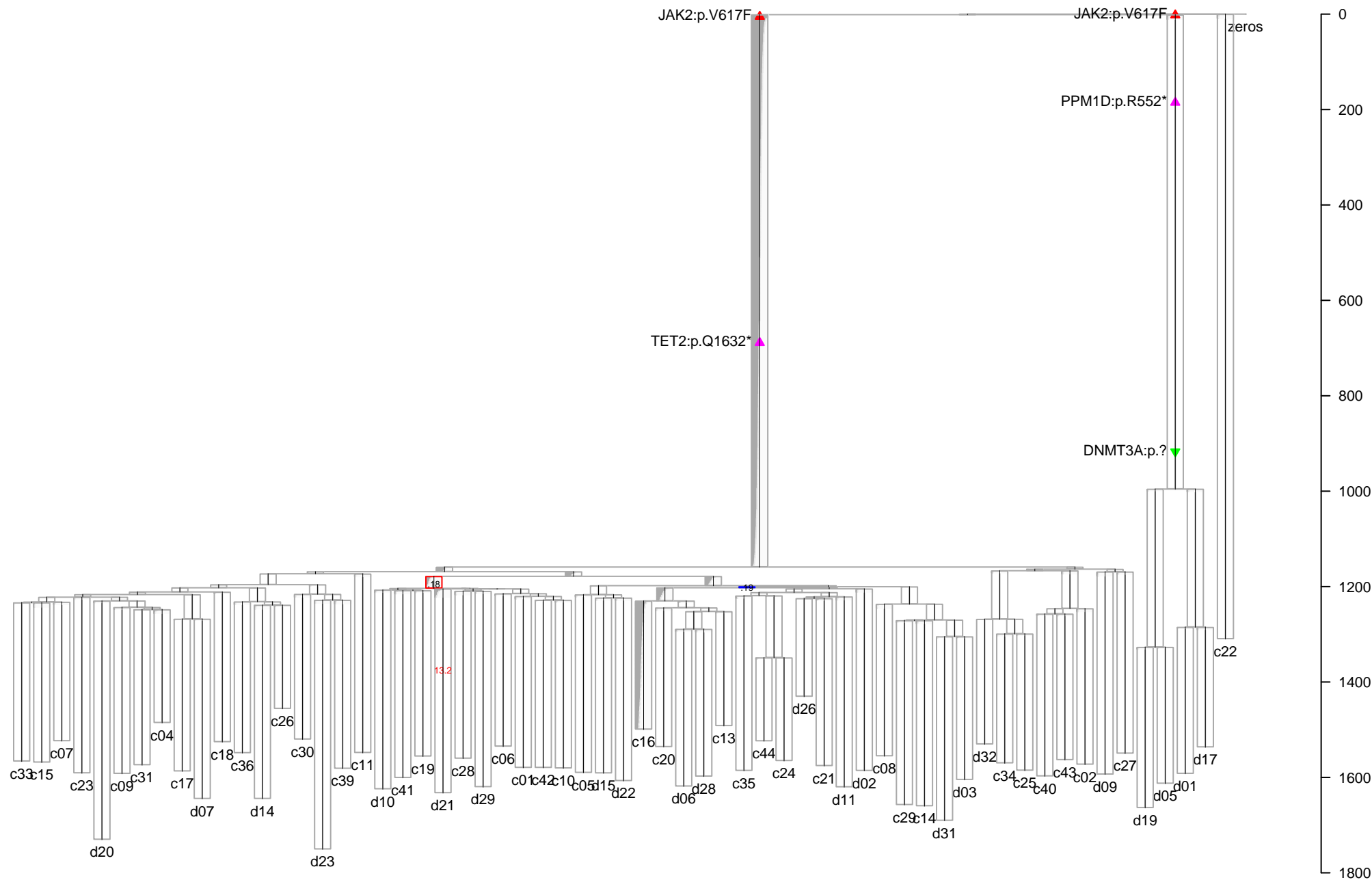


**PD4781: Annotated with VAF from d22**  
**Mean Depth=17.90**

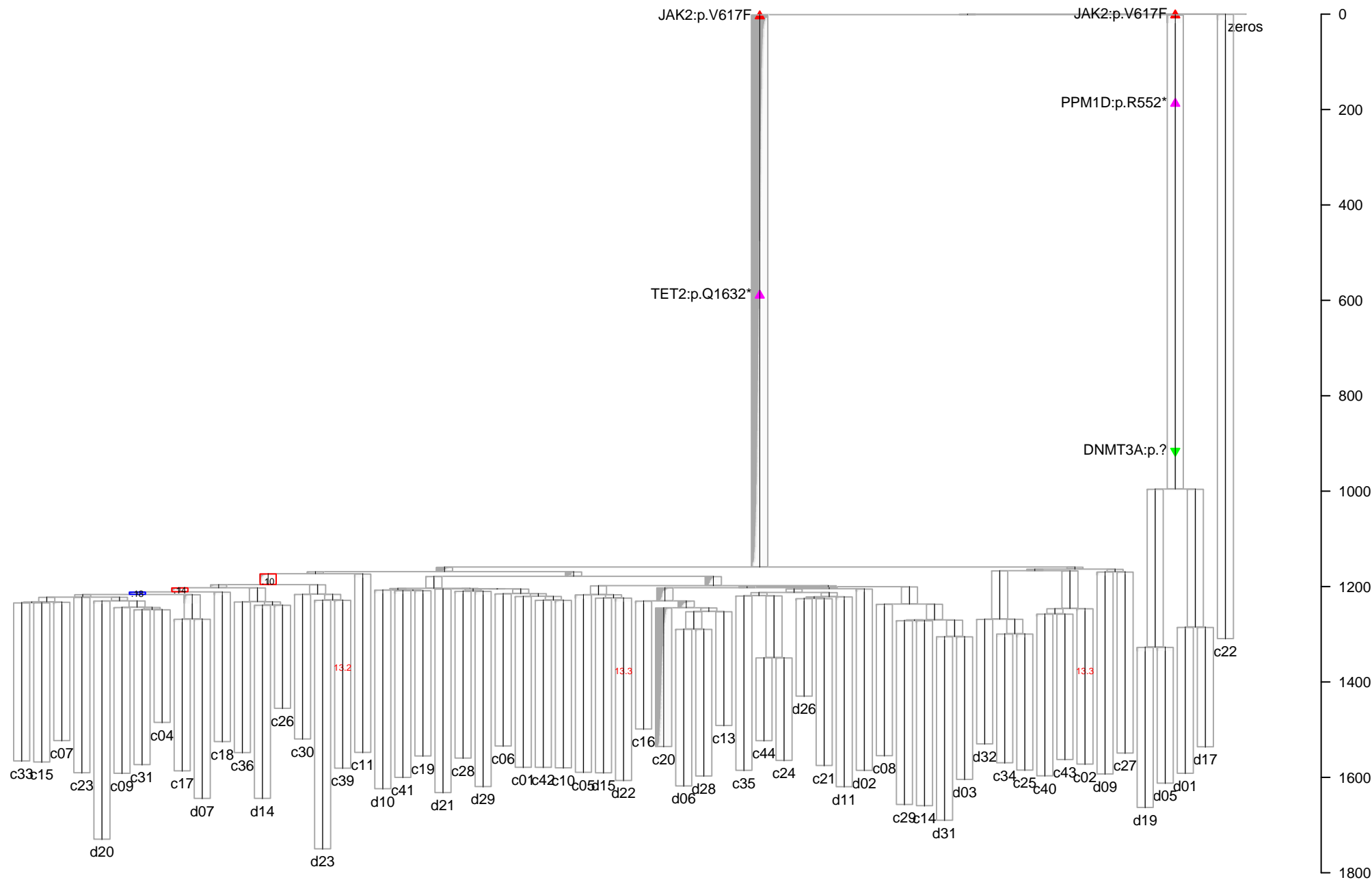




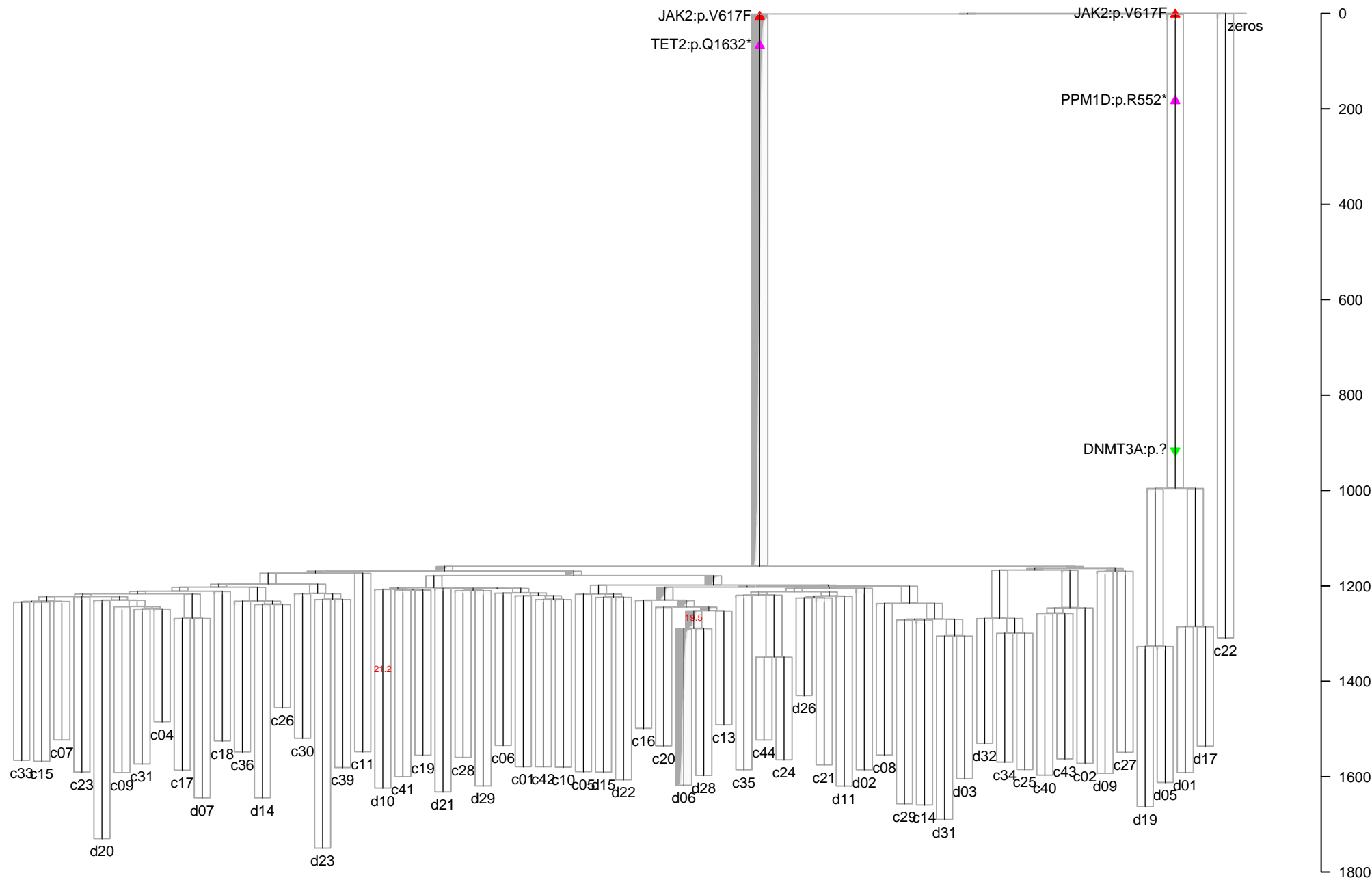
**PD4781: Annotated with VAF from c16**  
**Mean Depth=13.67**



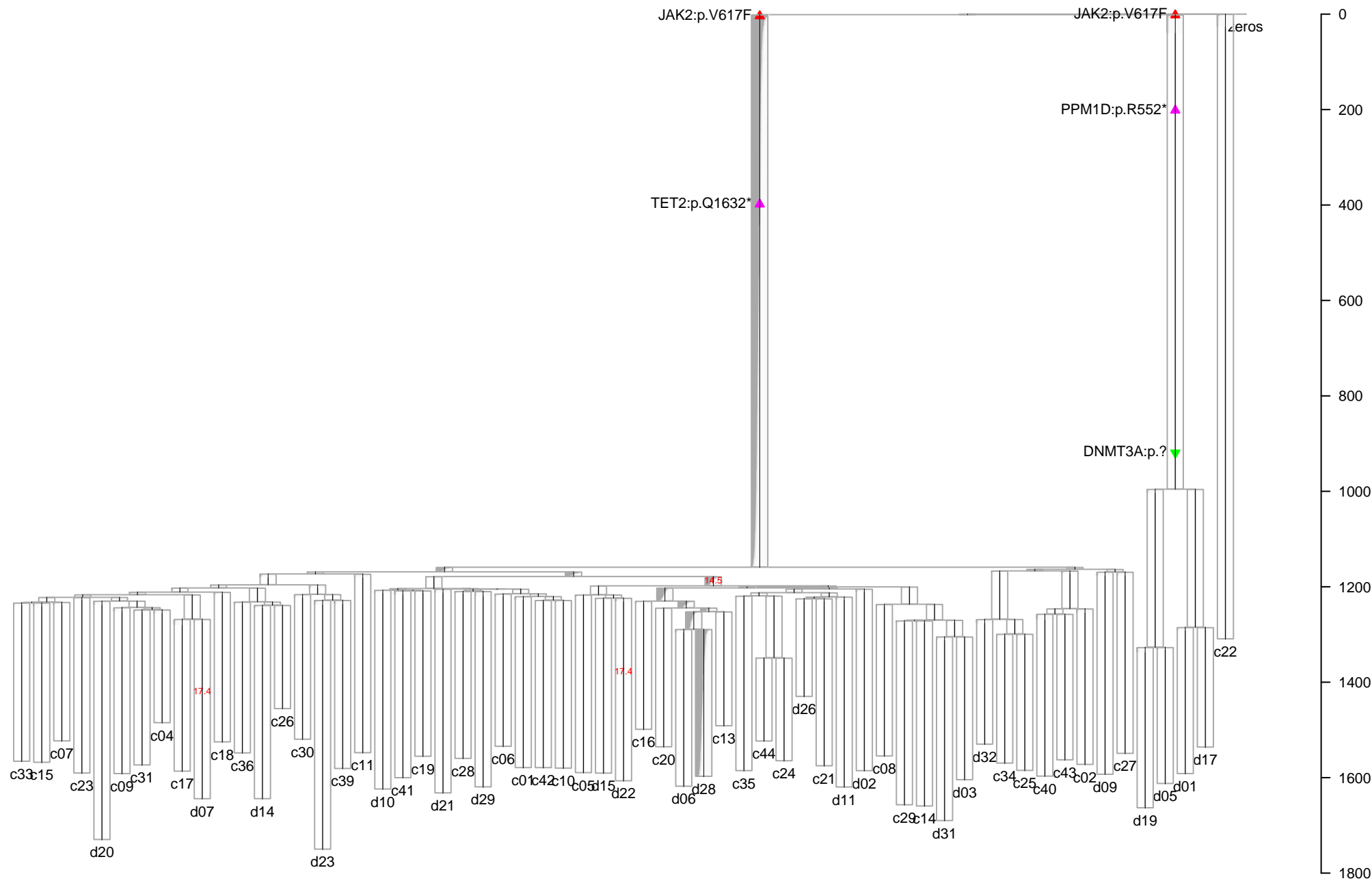
**PD4781: Annotated with VAF from c20**  
**Mean Depth=13.93**



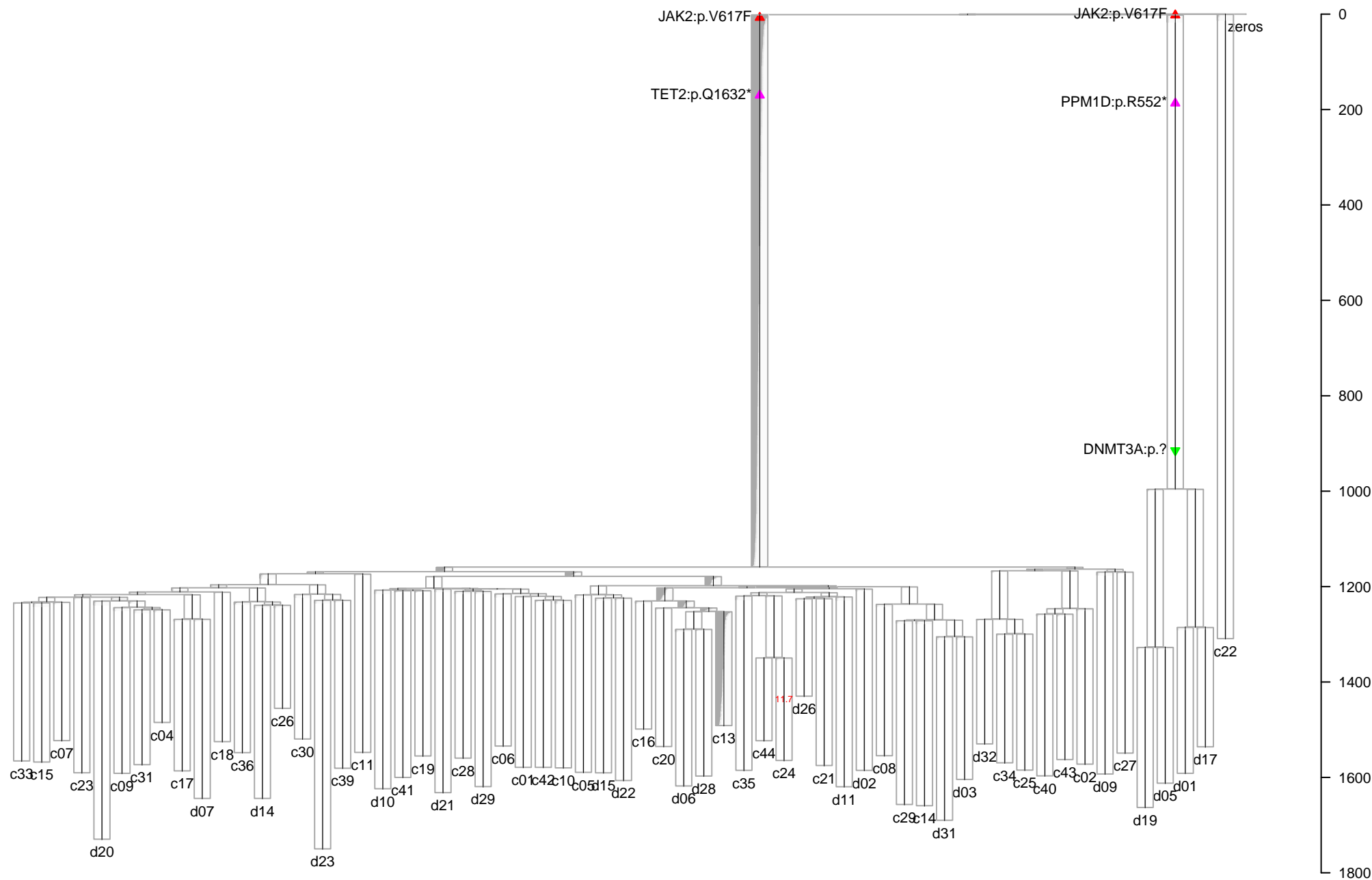
PD4781: Annotated with VAF from d06  
Mean Depth=21.89



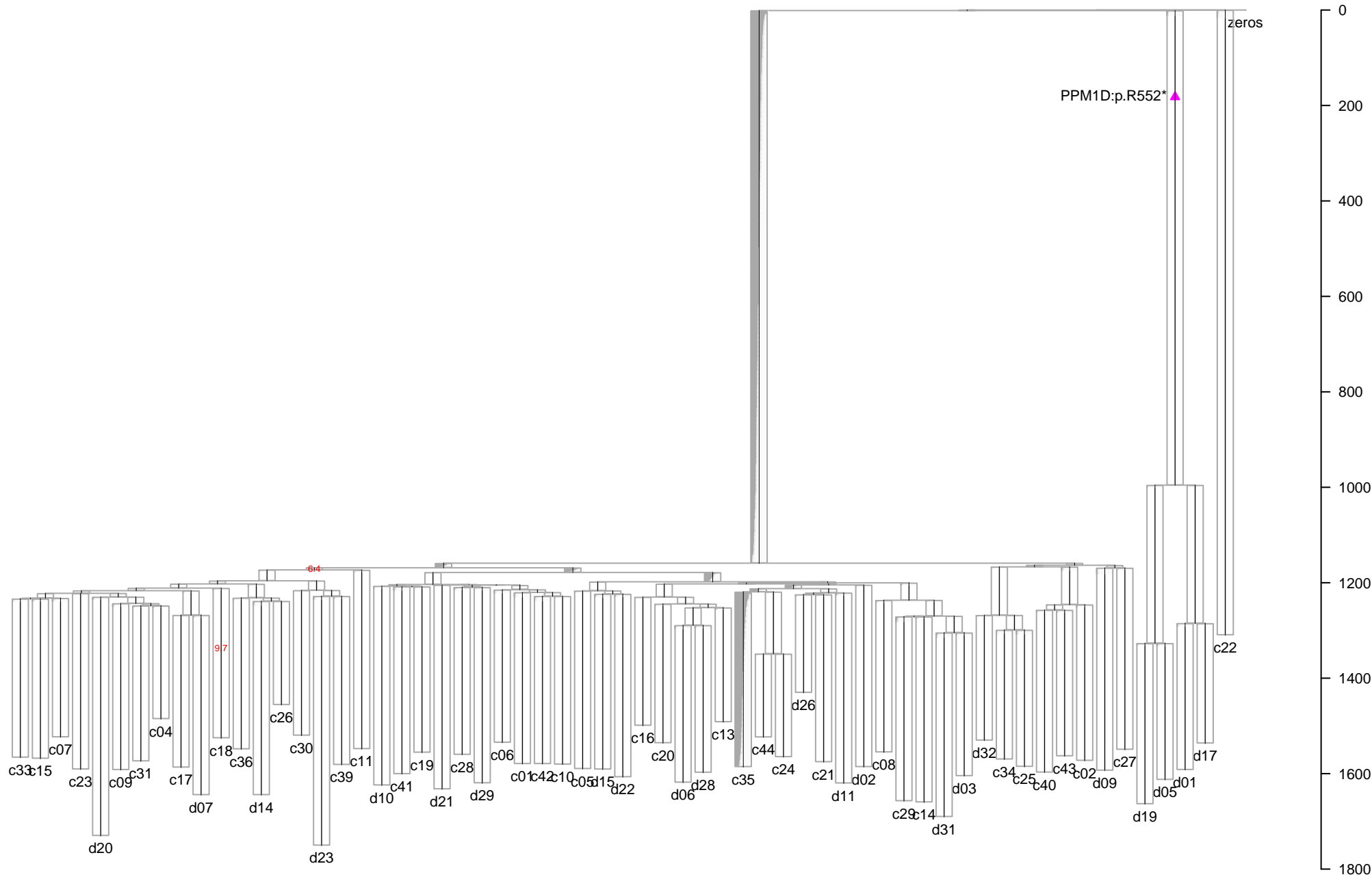
**PD4781: Annotated with VAF from d28**  
**Mean Depth=18.14**



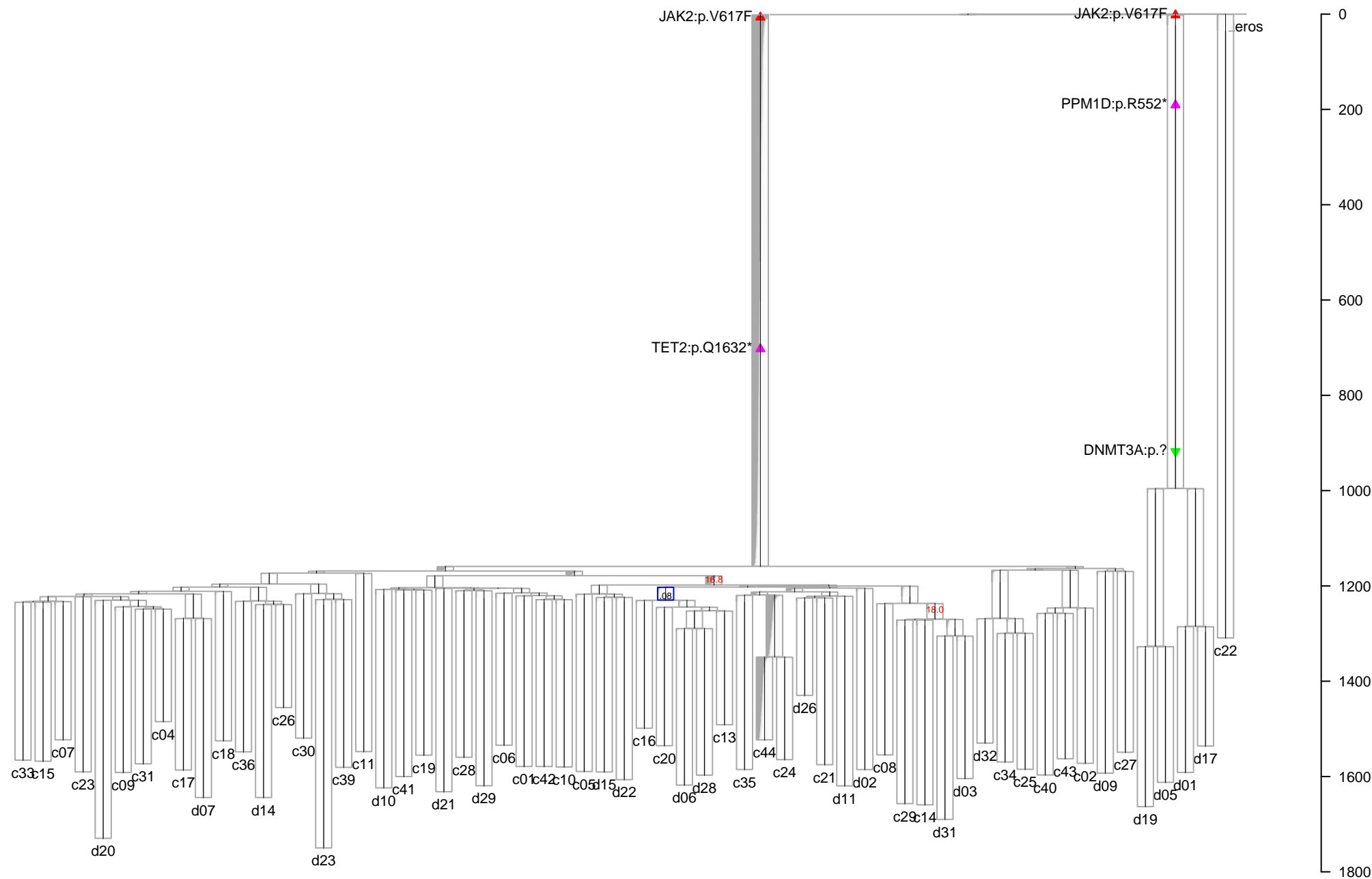
**PD4781: Annotated with VAF from c13**  
**Mean Depth=12.43**



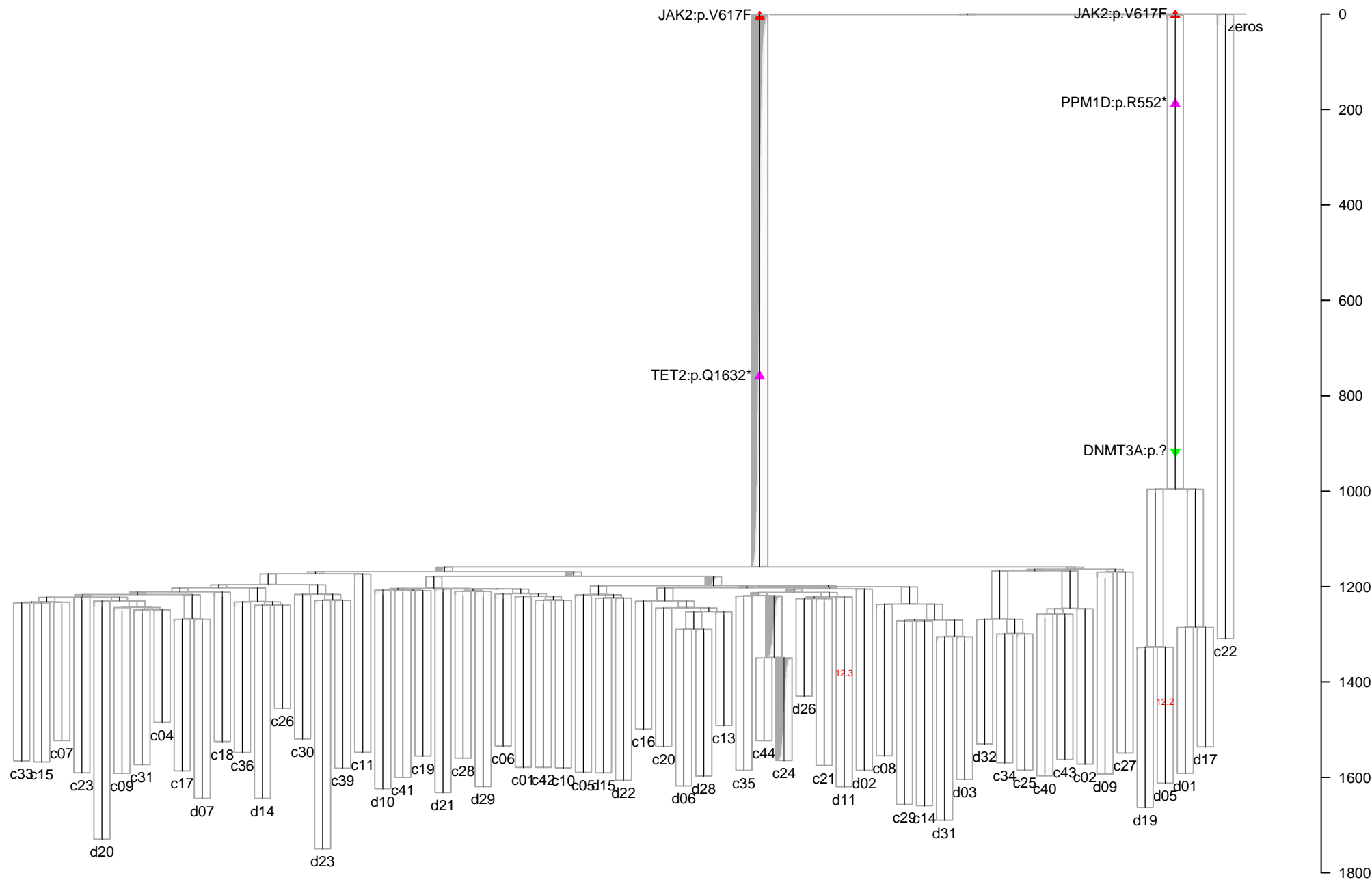
**PD4781: Annotated with VAF from c35**  
**Mean Depth=10.30**



**PD4781: Annotated with VAF from c44**  
**Mean Depth=20.31**

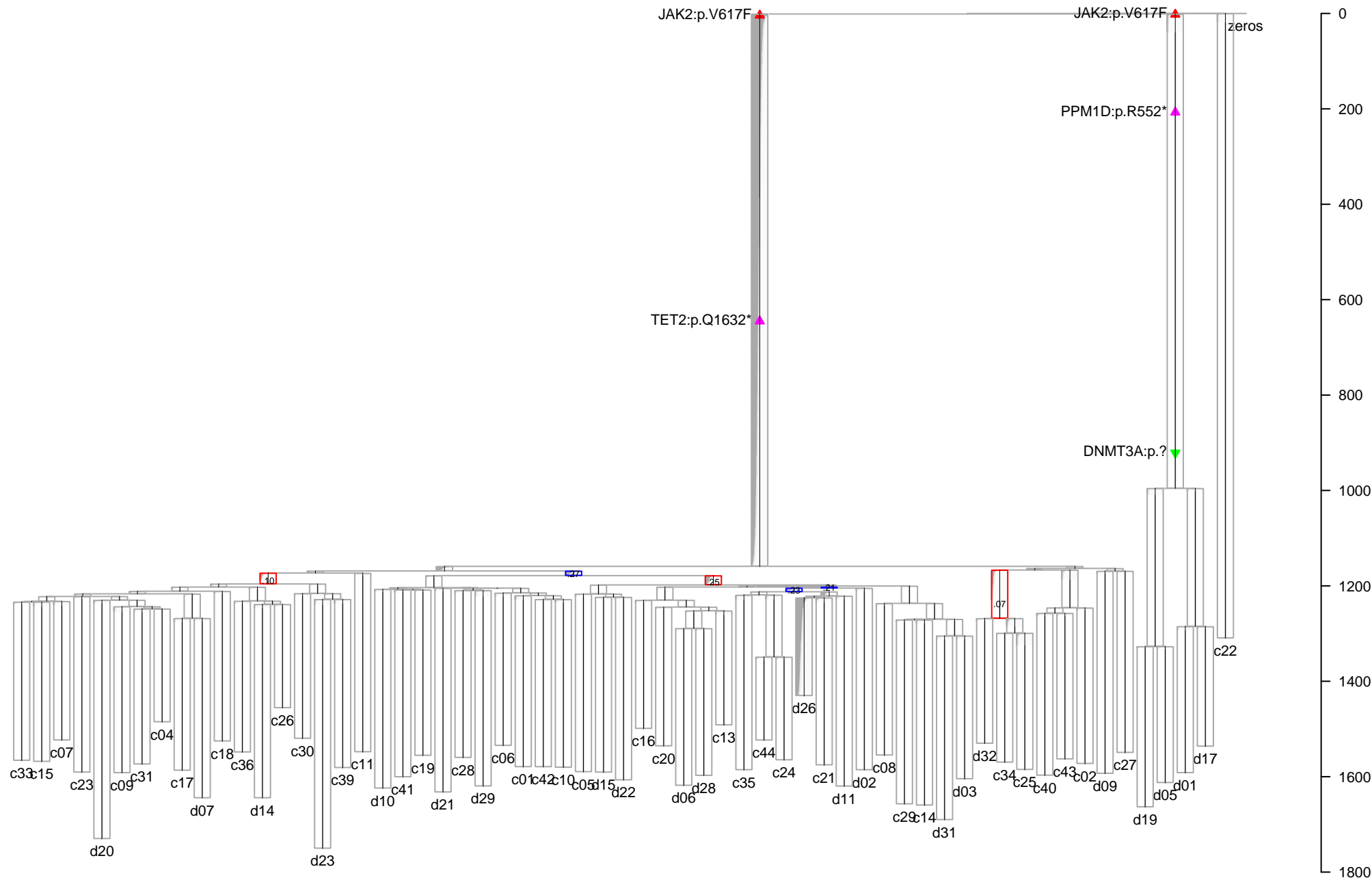


**PD4781: Annotated with VAF from c24**  
**Mean Depth=12.91**

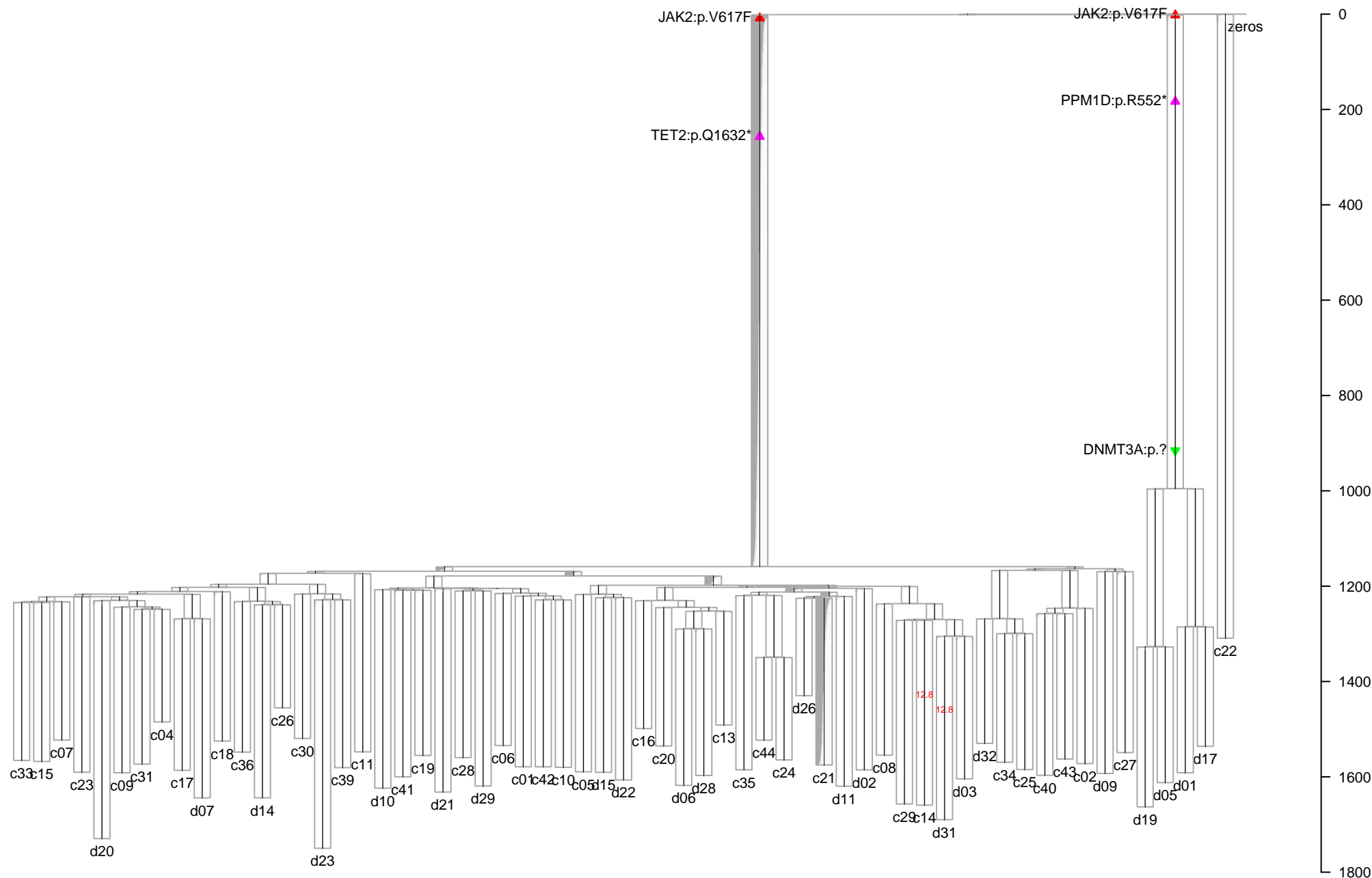




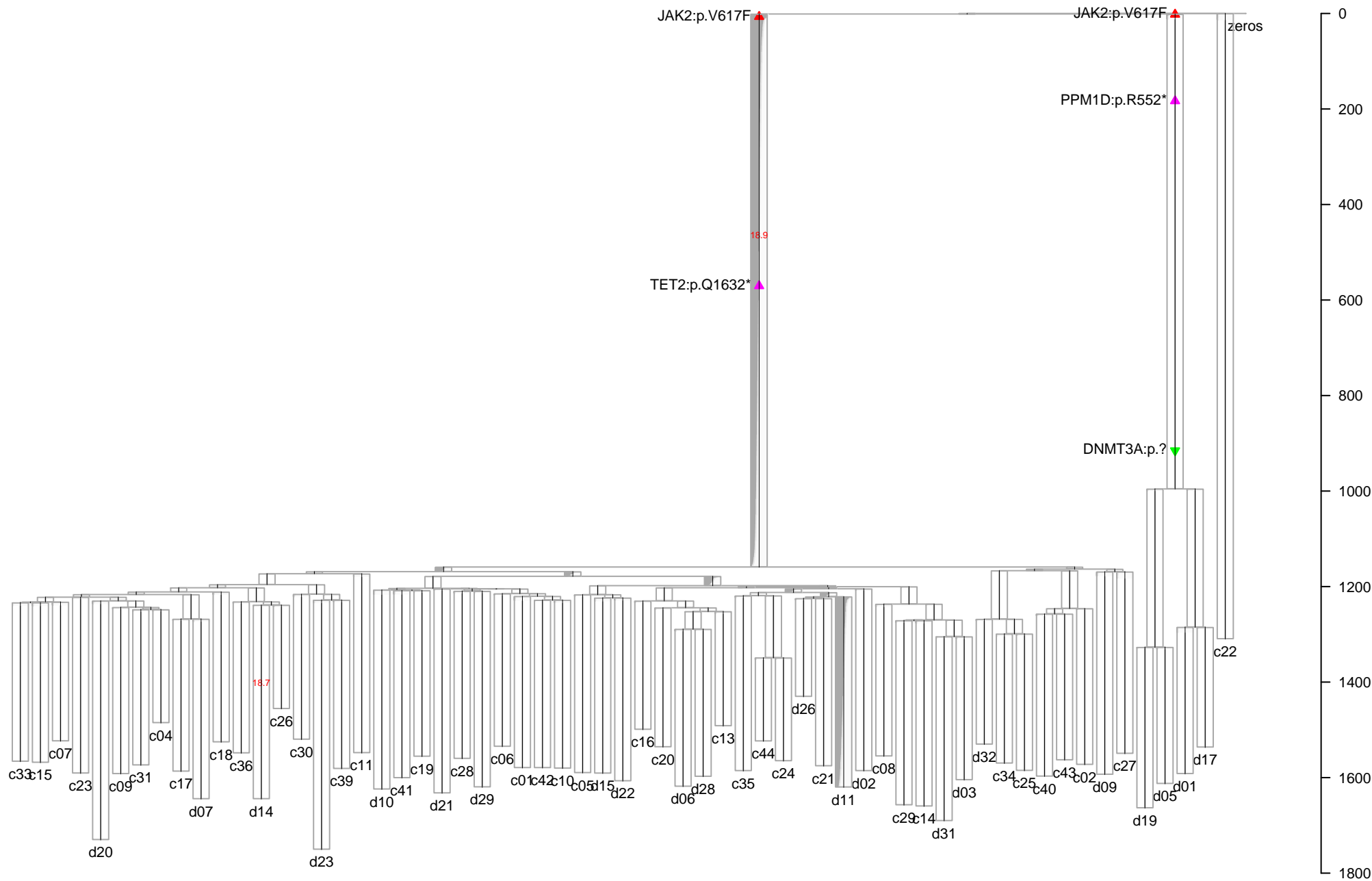
PD4781: Annotated with VAF from d26  
Mean Depth=15.45



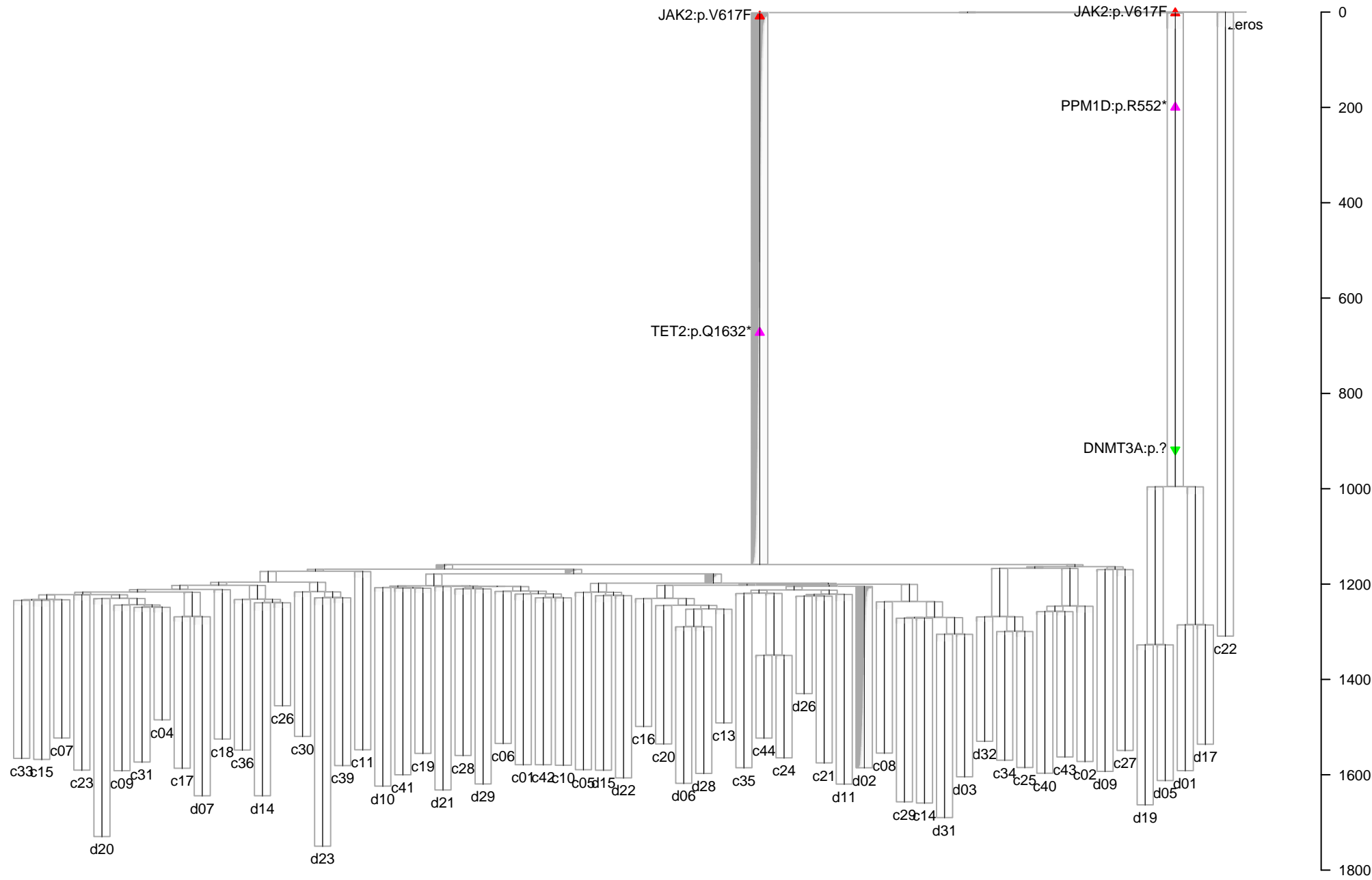
**PD4781: Annotated with VAF from c21**  
**Mean Depth=13.37**



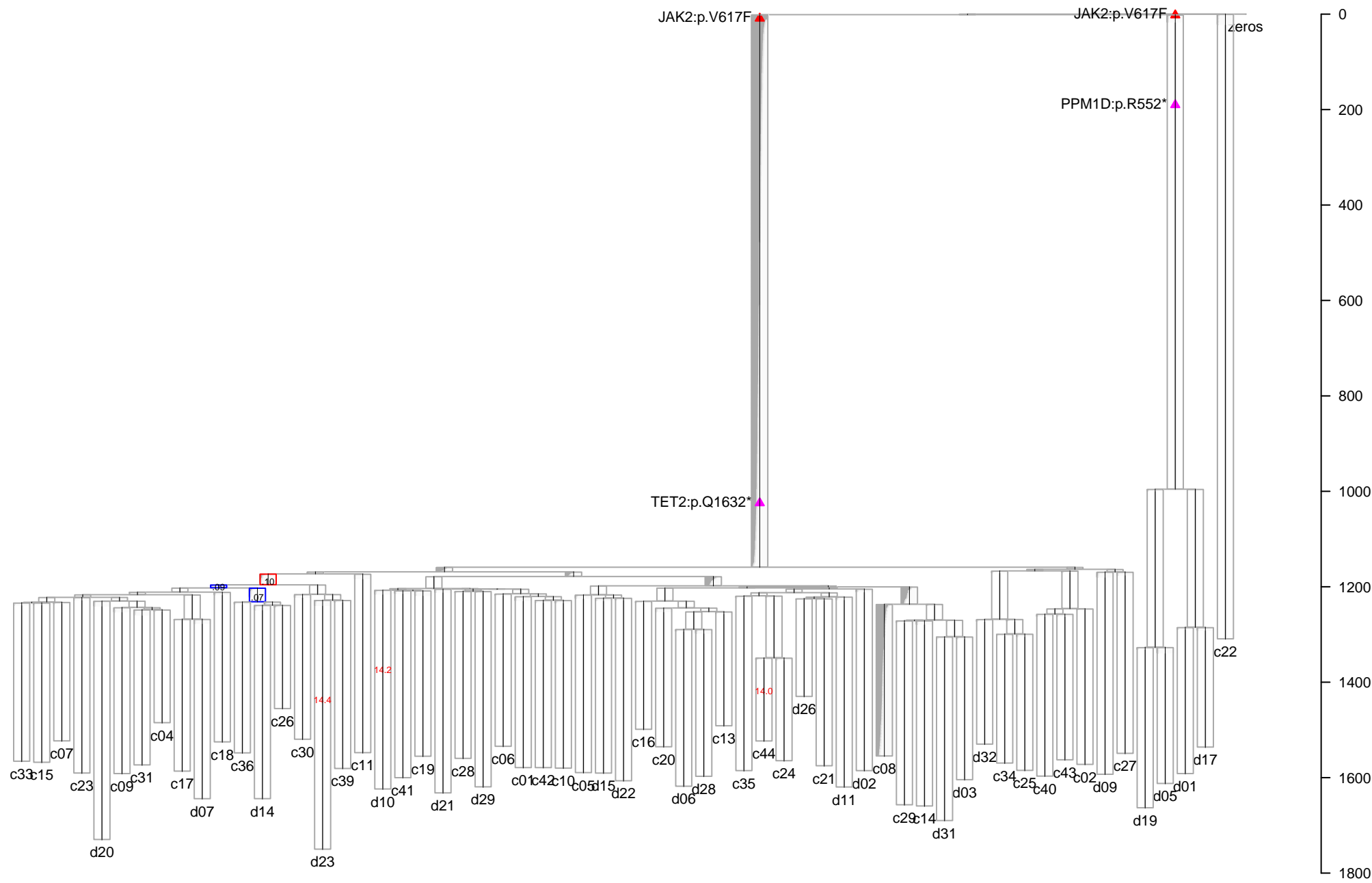
**PD4781: Annotated with VAF from d11**  
**Mean Depth=19.35**



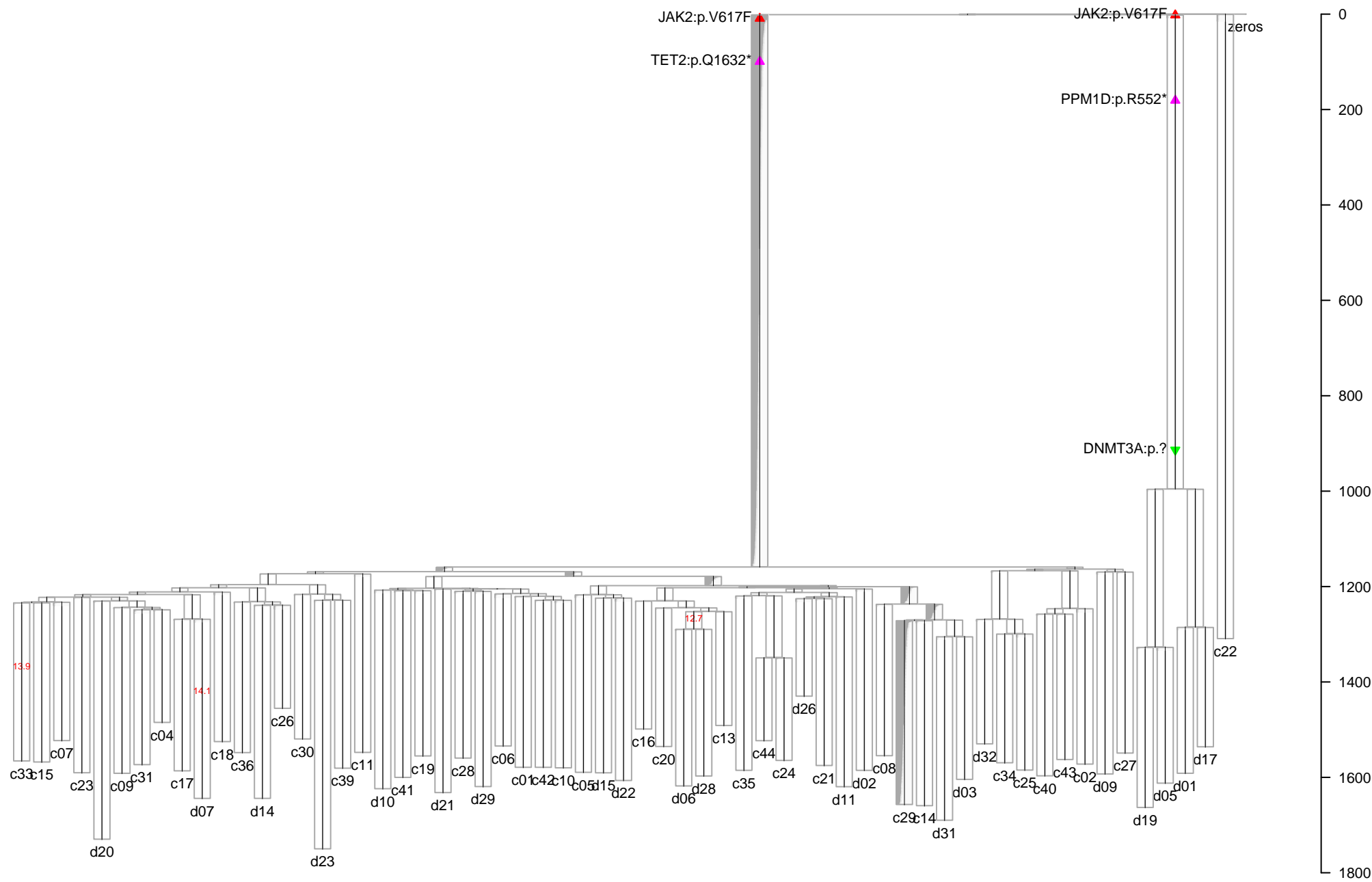
PD4781: Annotated with VAF from d02  
Mean Depth=18.67



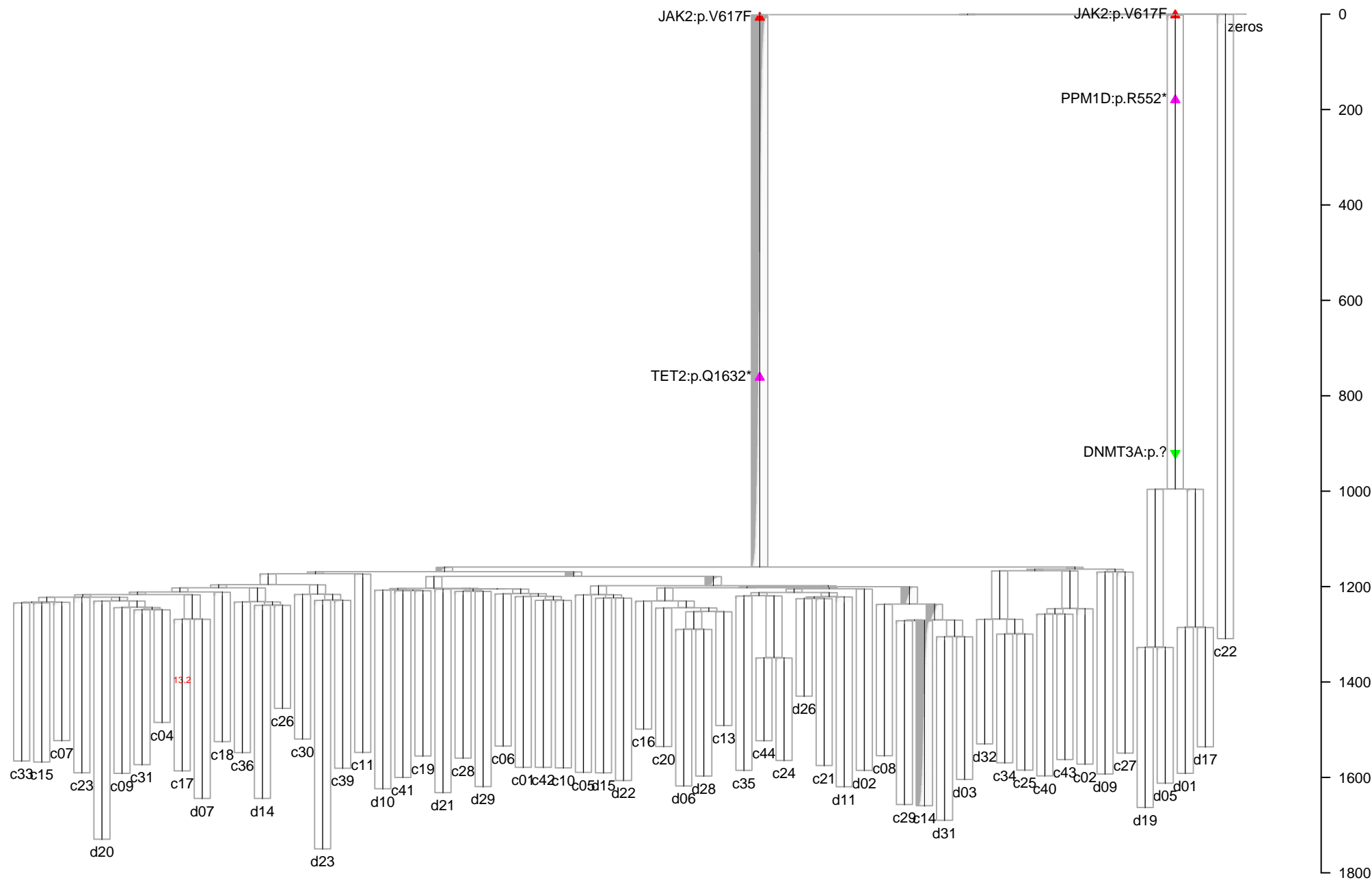
**PD4781: Annotated with VAF from c08**  
**Mean Depth=14.85**



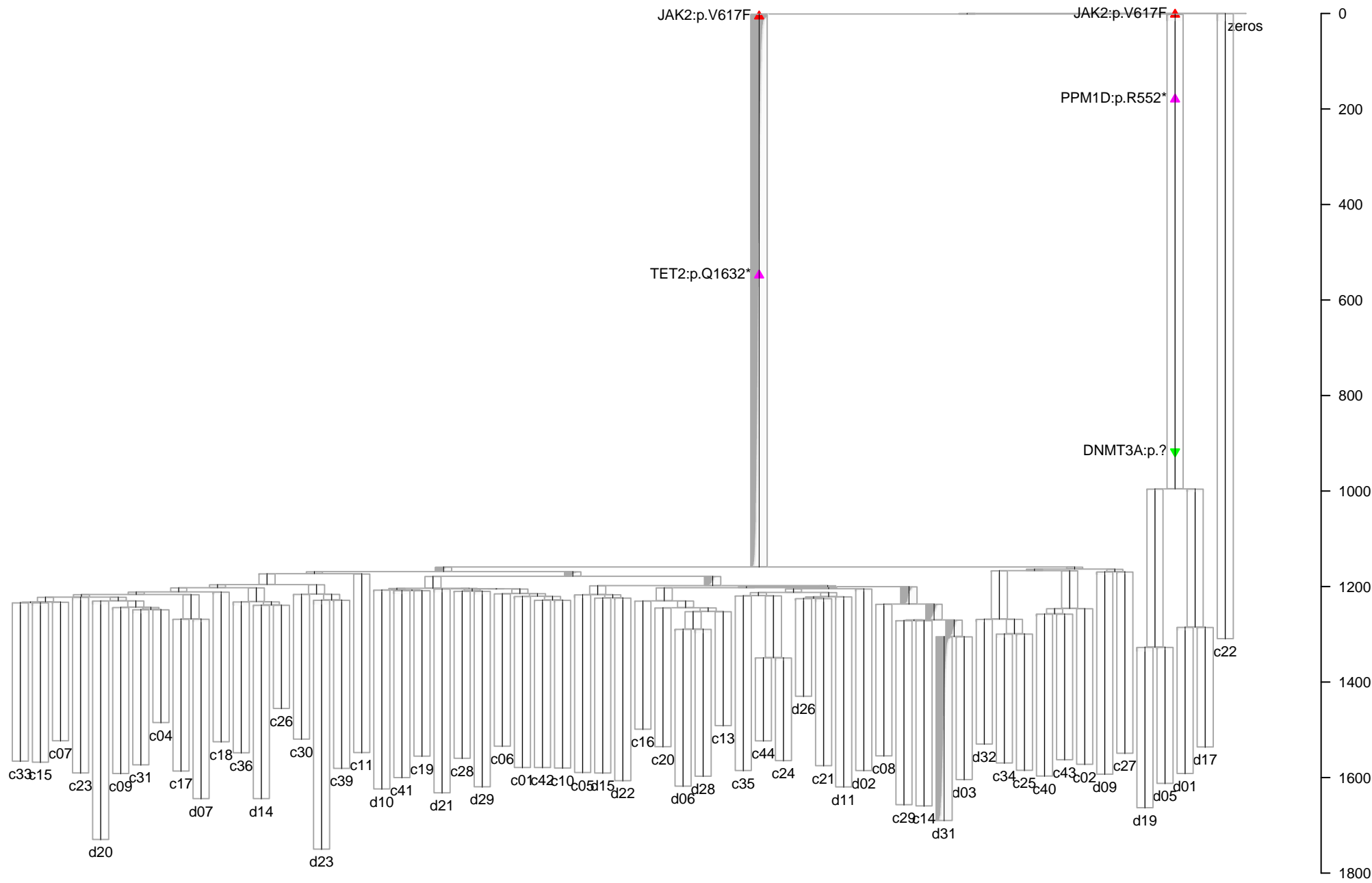
**PD4781: Annotated with VAF from c29**  
**Mean Depth=14.84**



**PD4781: Annotated with VAF from c14**  
**Mean Depth=13.88**

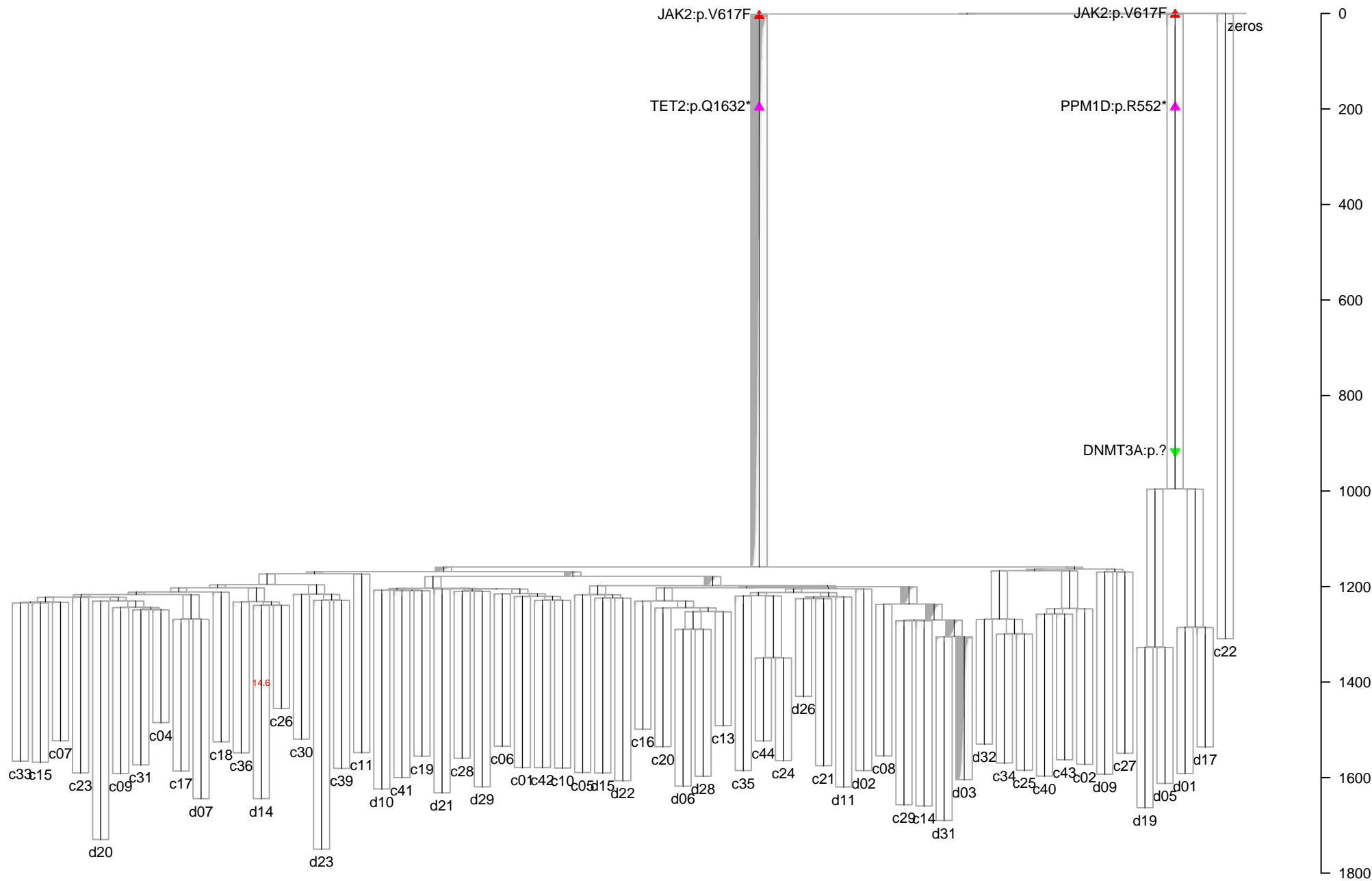


**PD4781: Annotated with VAF from d31**  
**Mean Depth=21.88**

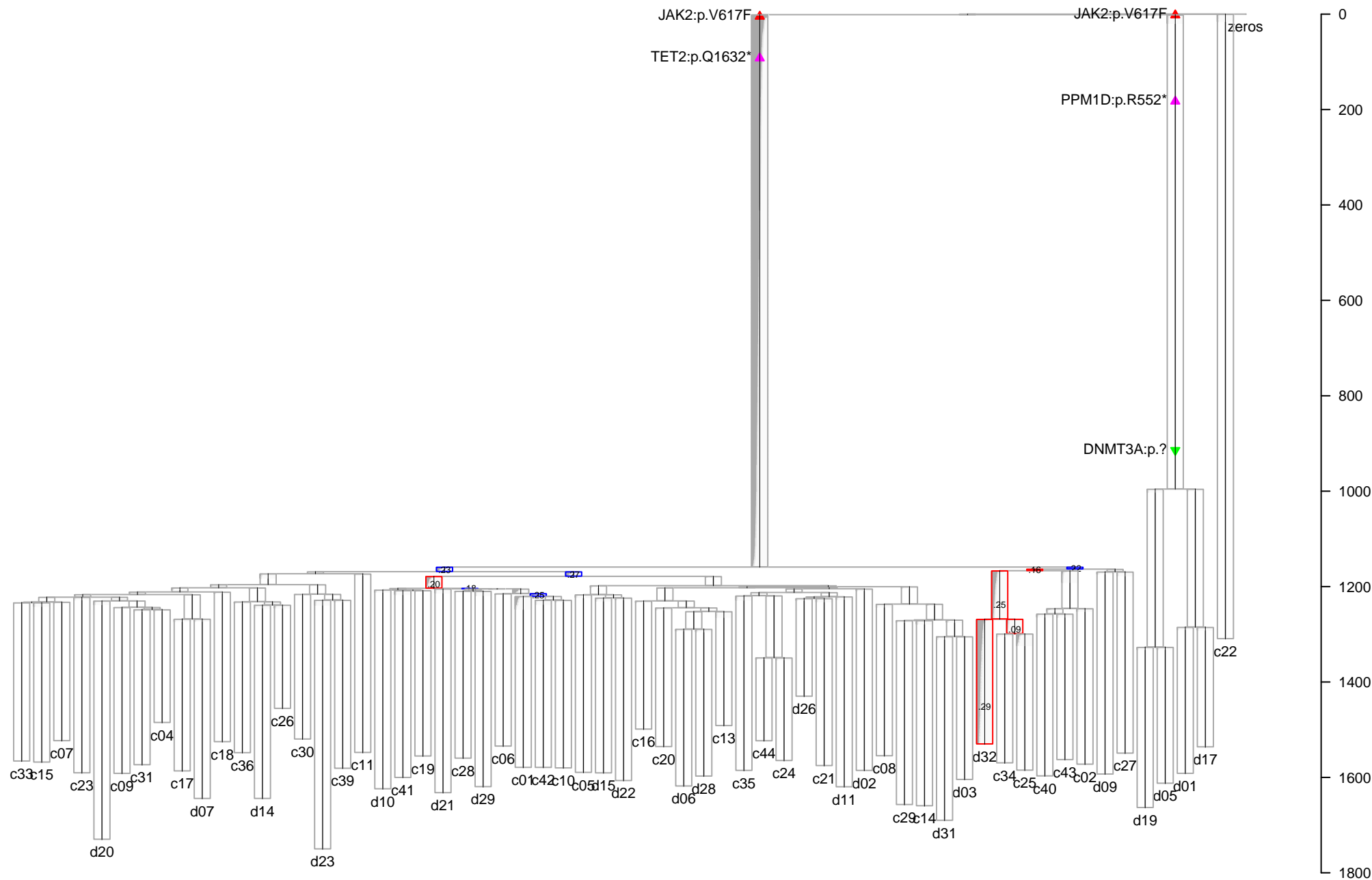




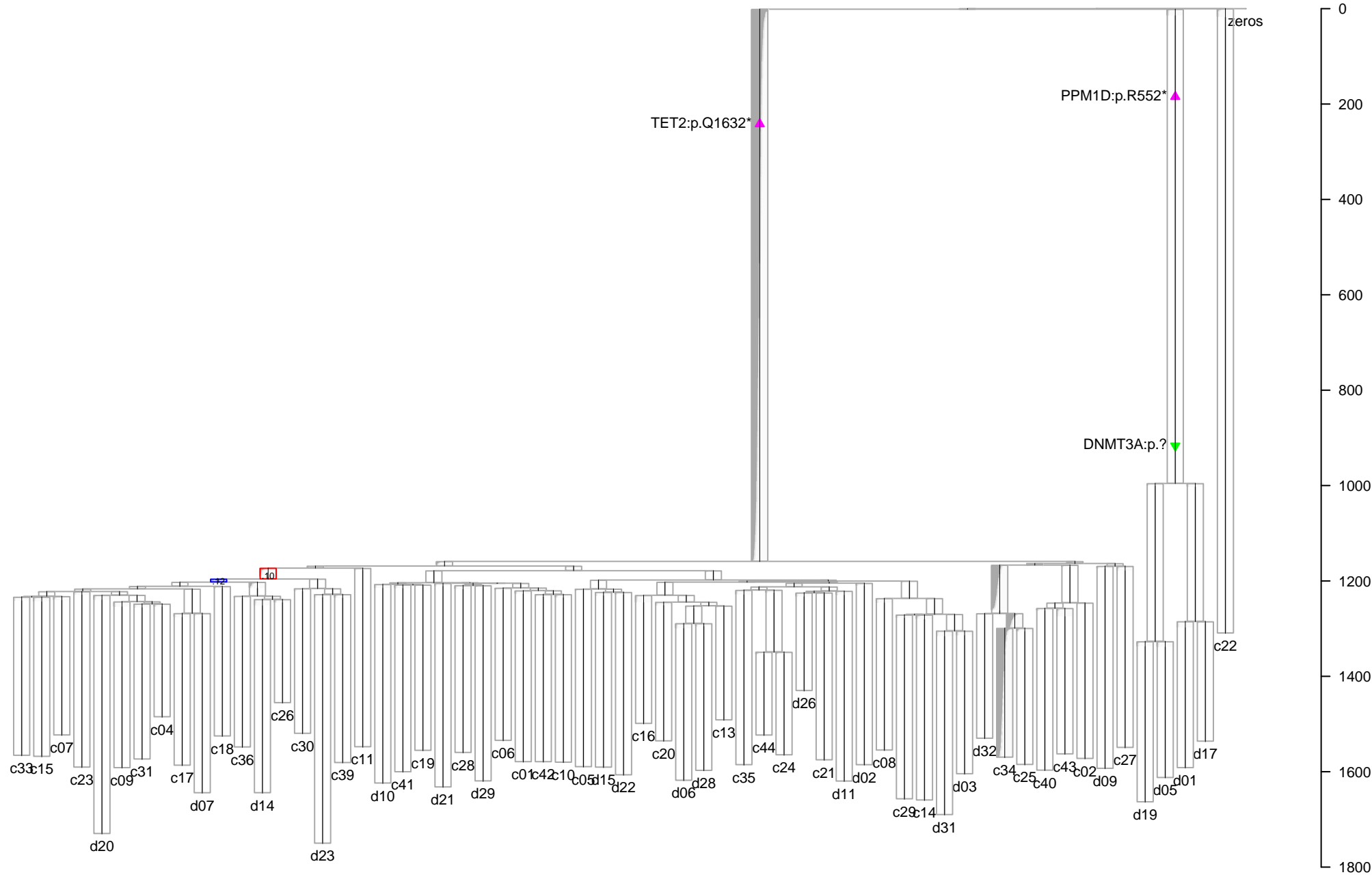
**PD4781: Annotated with VAF from d03**  
**Mean Depth=15.14**



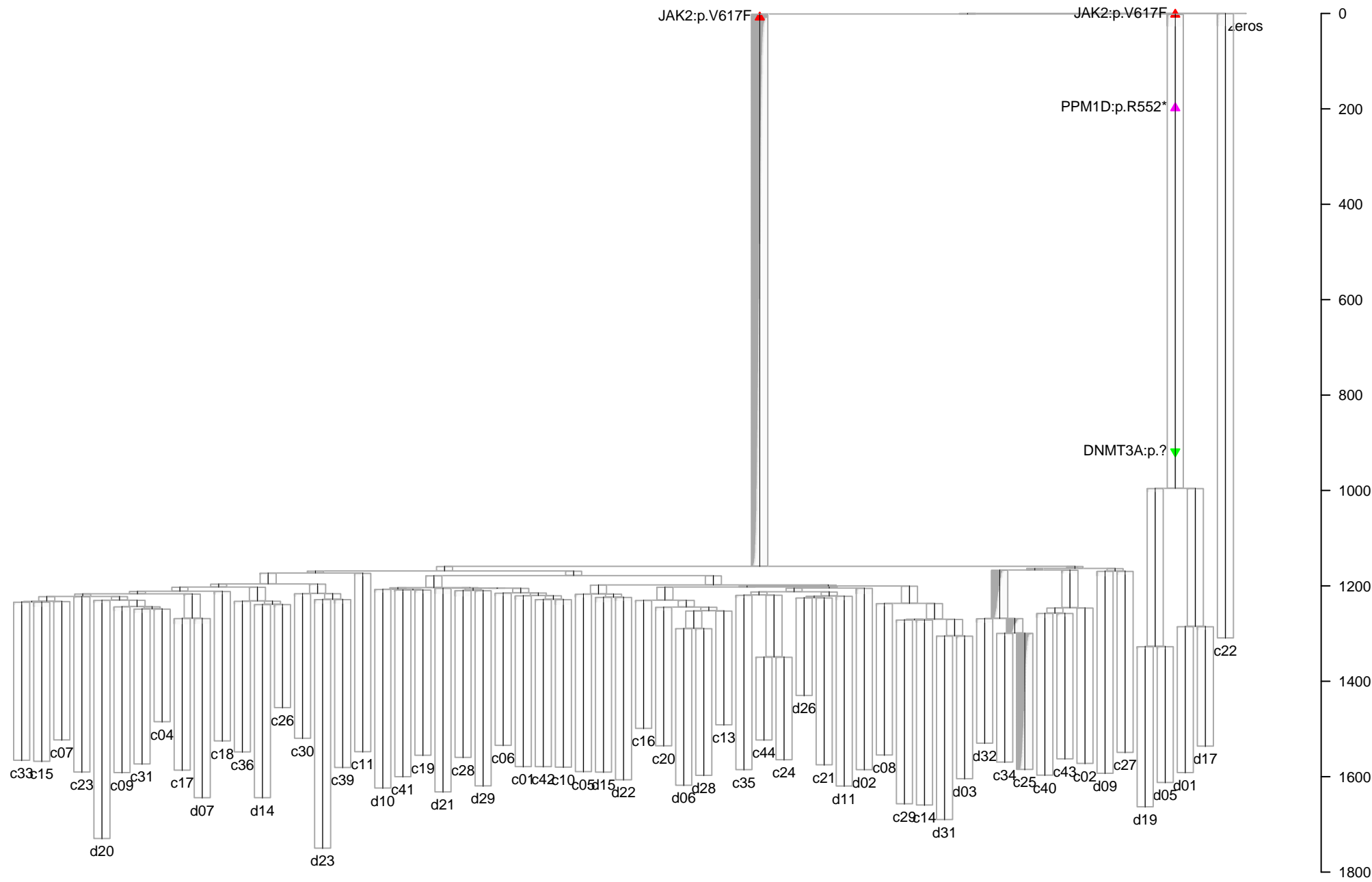
**PD4781: Annotated with VAF from d32**  
**Mean Depth=16.82**



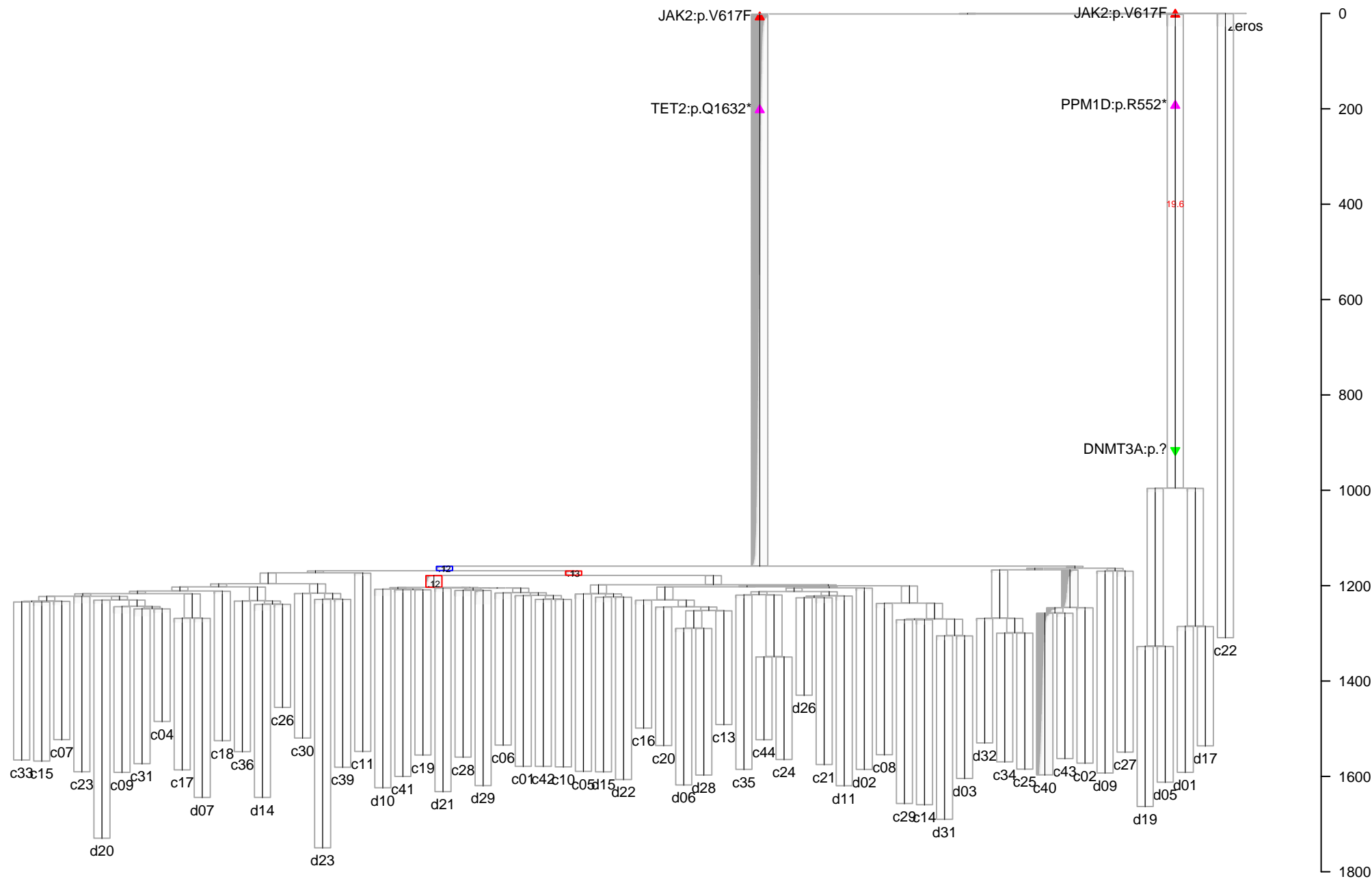
PD4781: Annotated with VAF from c34  
Mean Depth=12.85



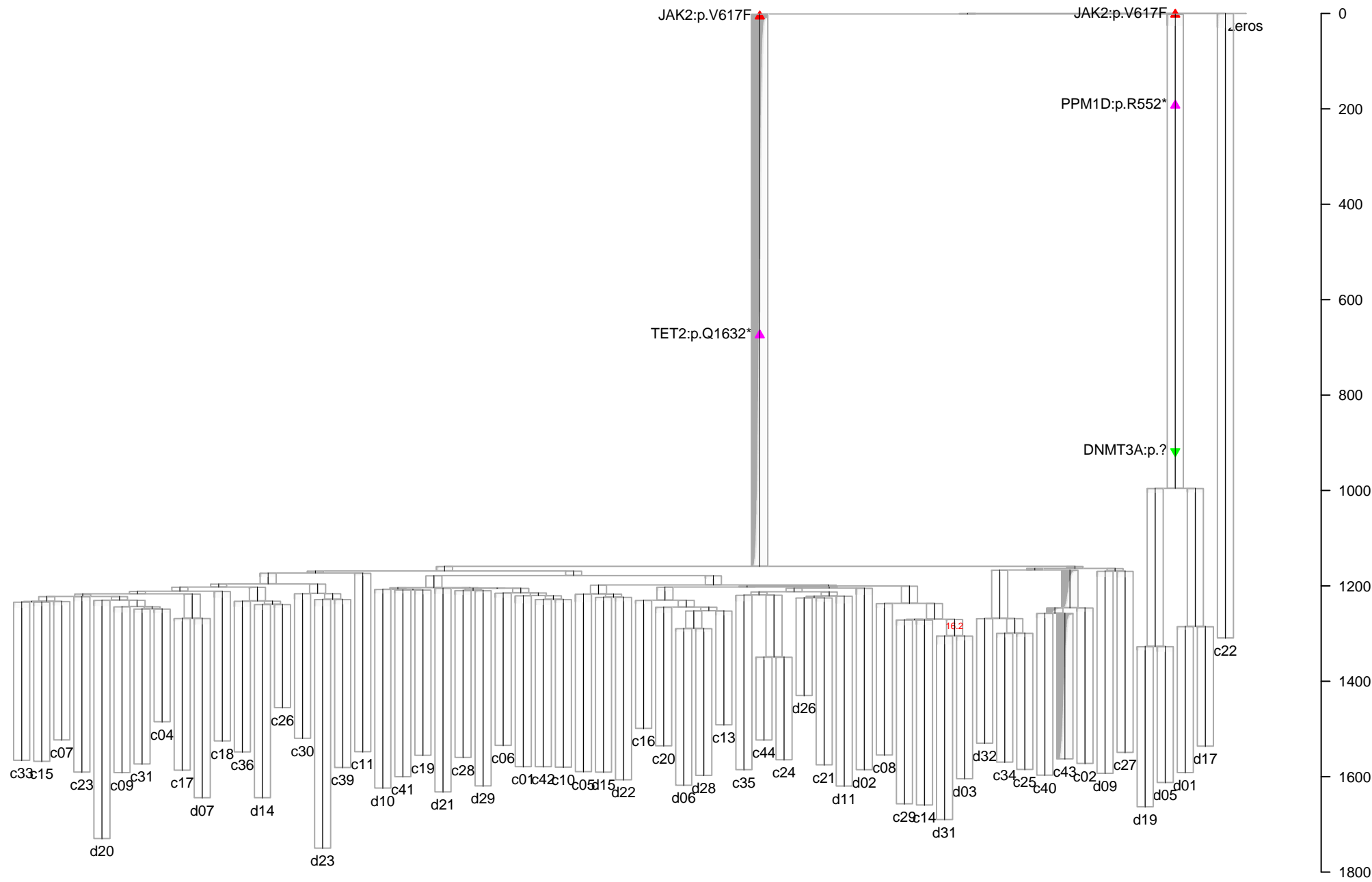
PD4781: Annotated with VAF from c25  
Mean Depth=14.20



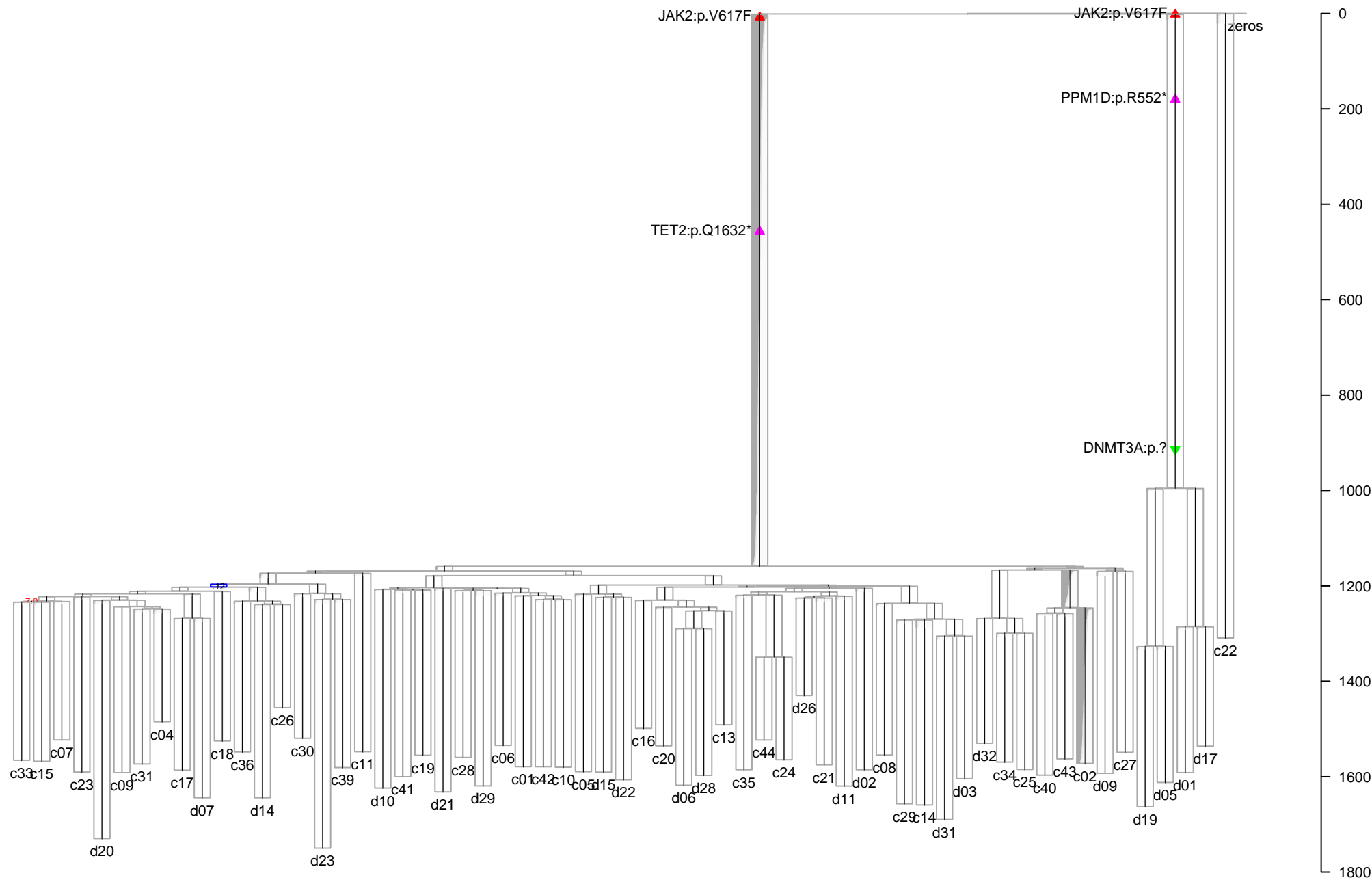
PD4781: Annotated with VAF from c40  
Mean Depth=20.02



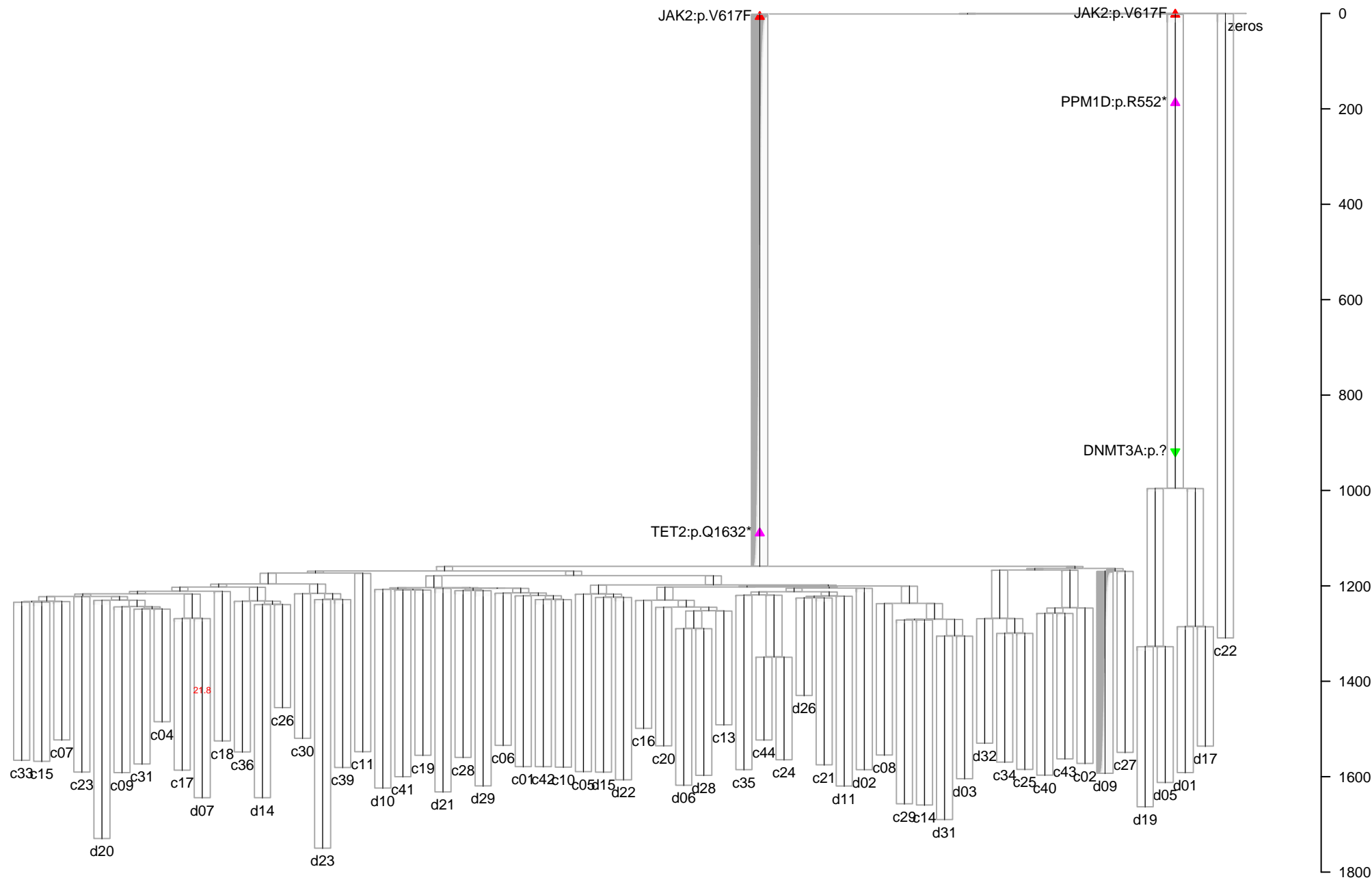
PD4781: Annotated with VAF from c43  
Mean Depth=18.78



PD4781: Annotated with VAF from c02  
Mean Depth=14.27

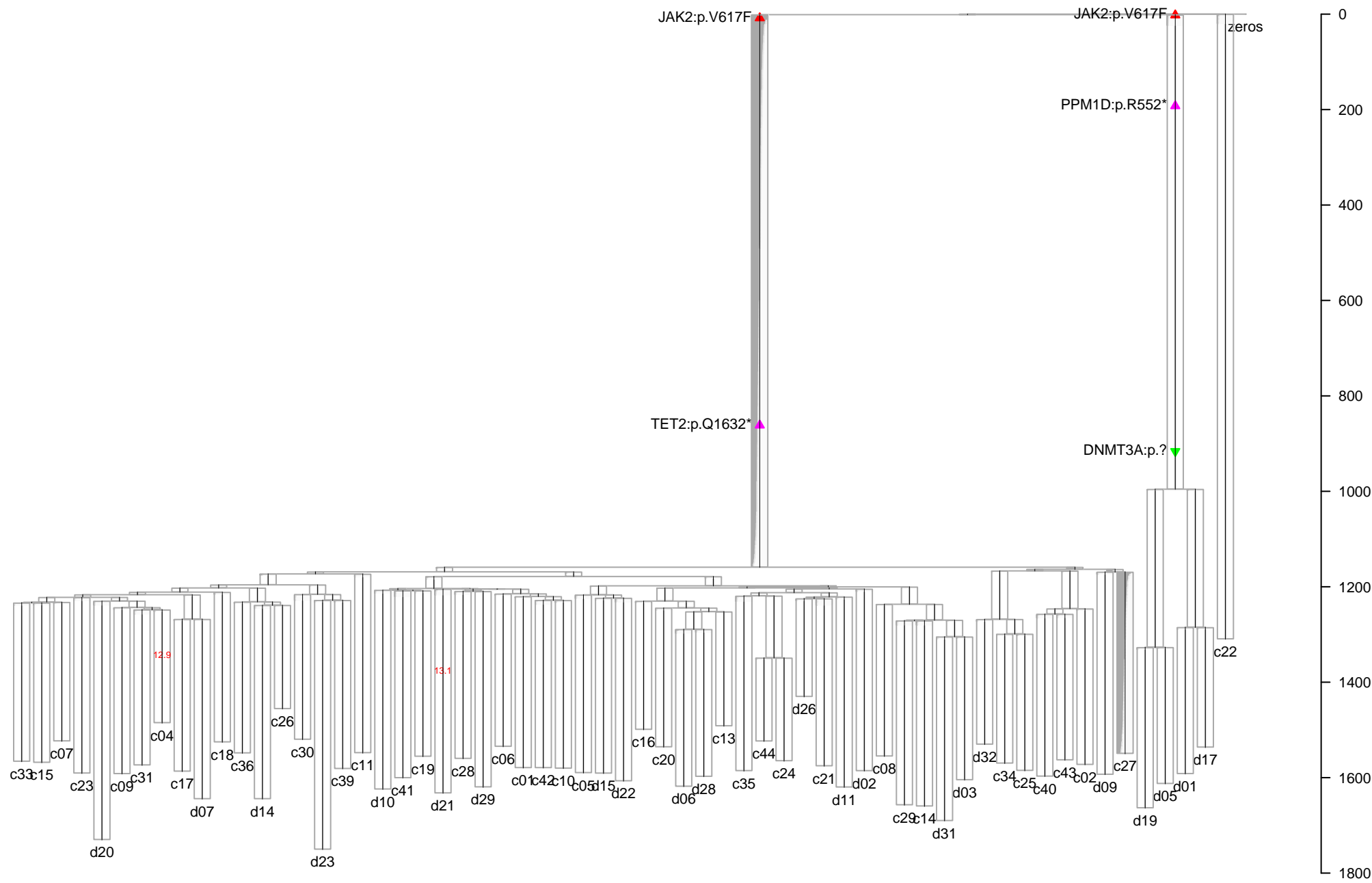


PD4781: Annotated with VAF from d09  
Mean Depth=22.57

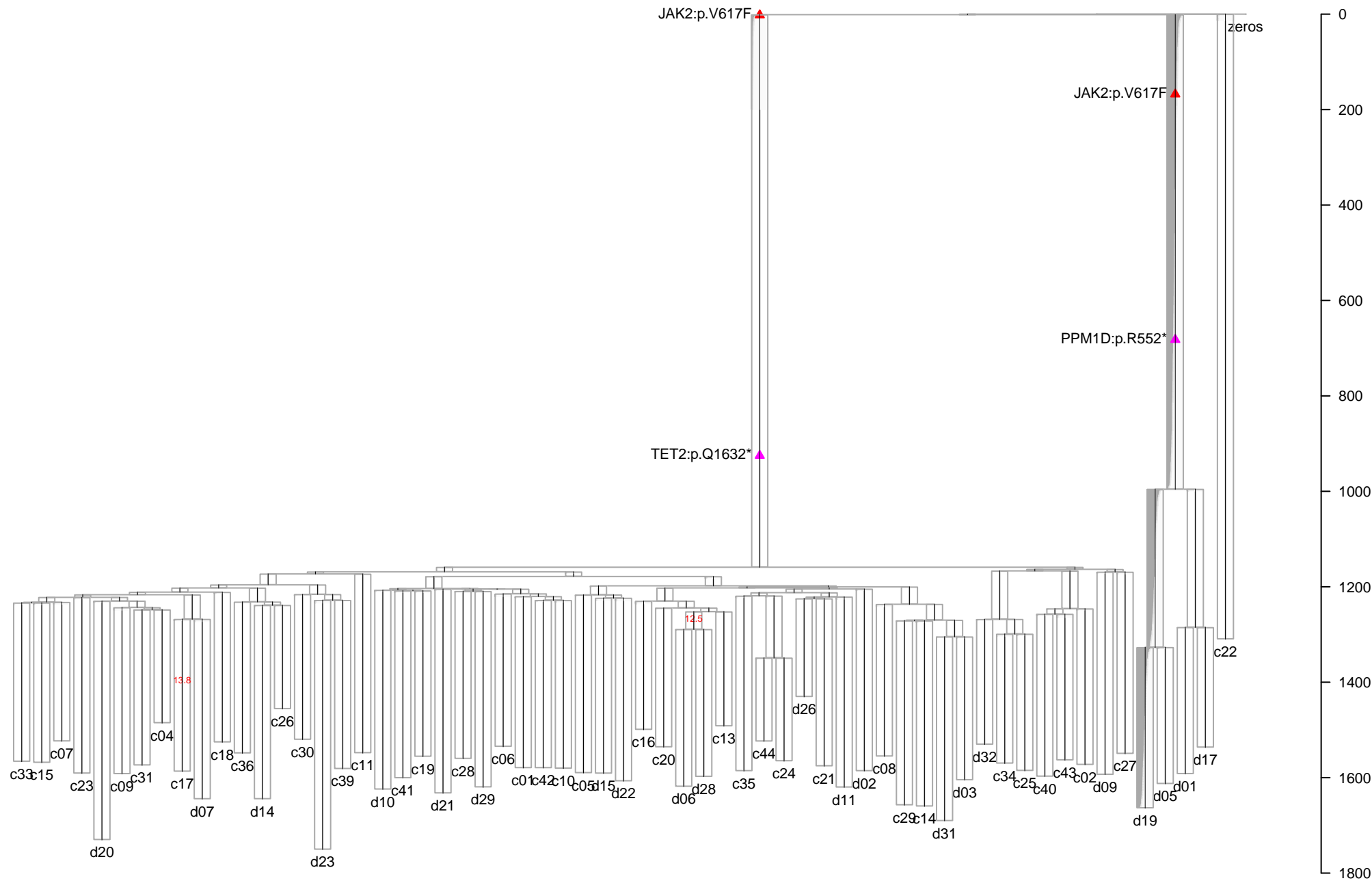




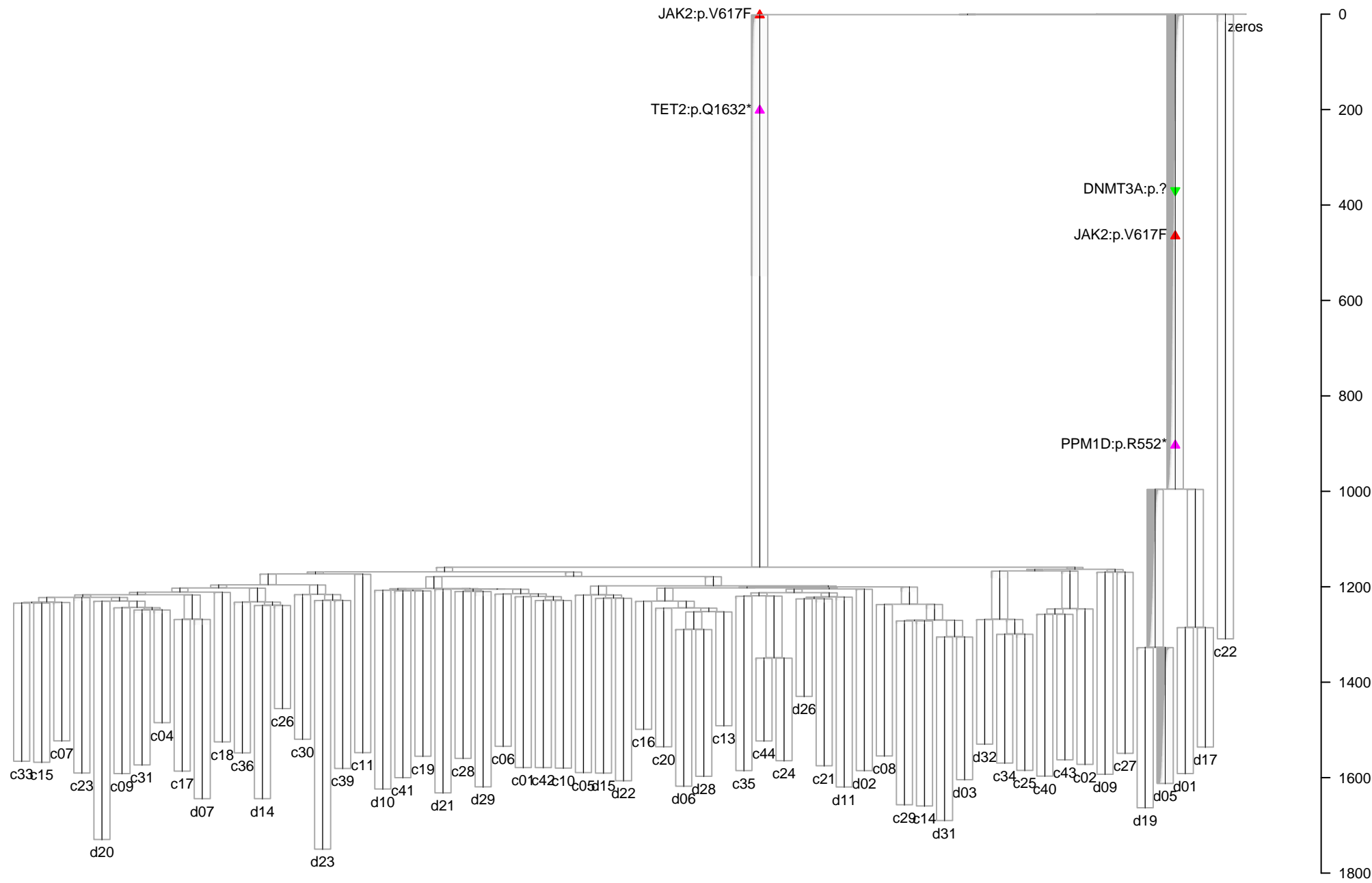
**PD4781: Annotated with VAF from c27**  
**Mean Depth=13.66**



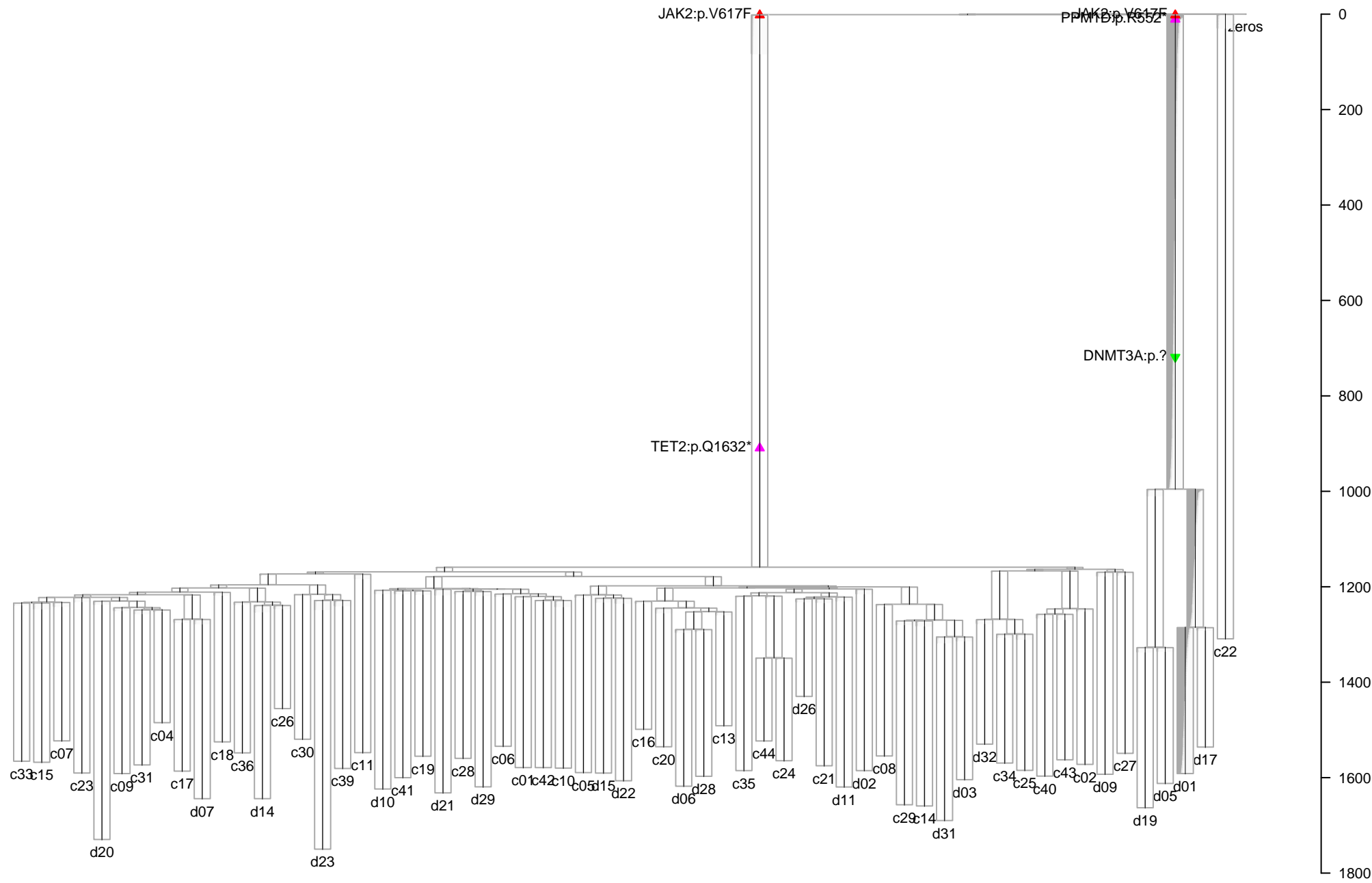
PD4781: Annotated with VAF from d19  
Mean Depth=14.50



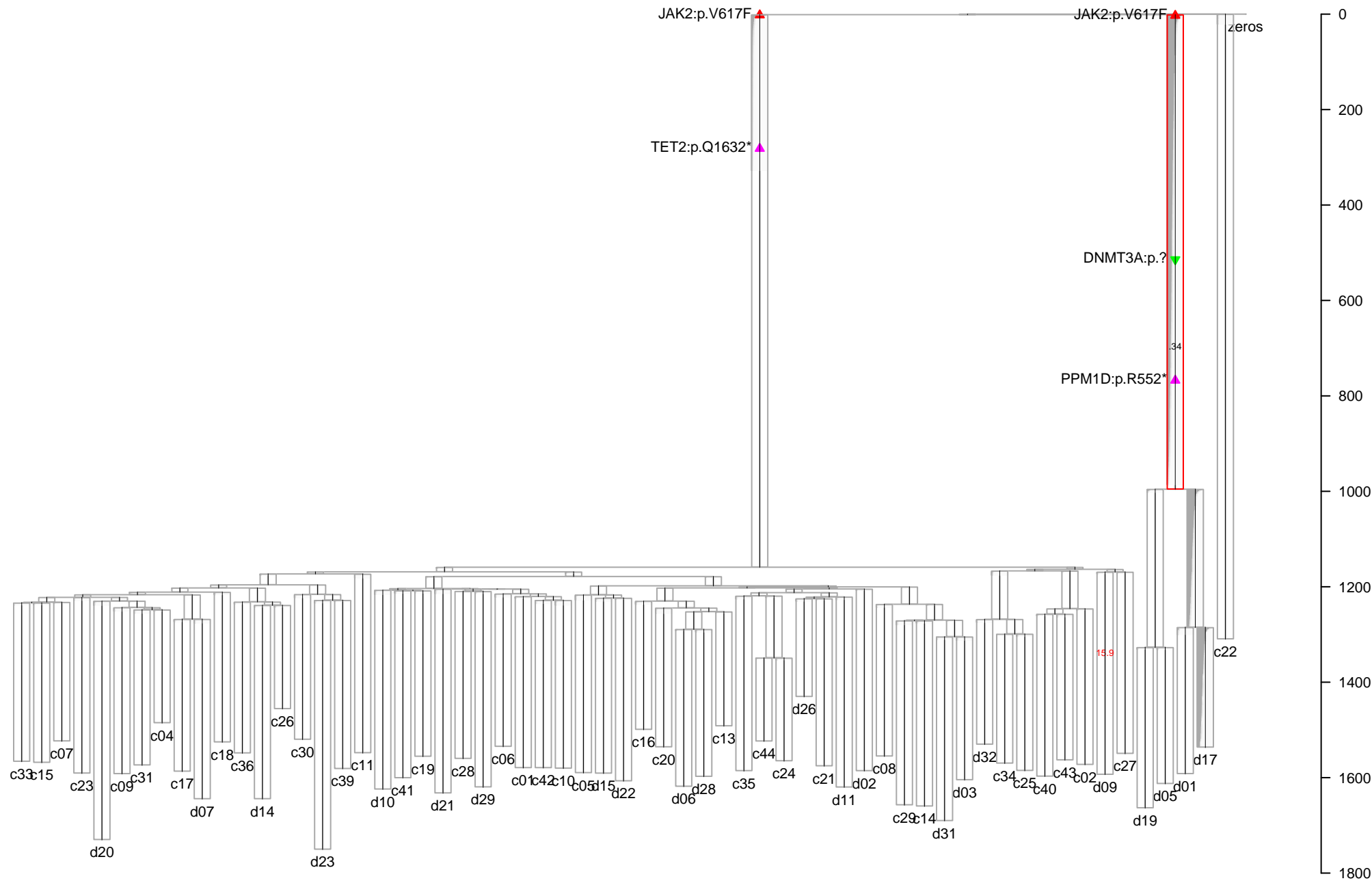
PD4781: Annotated with VAF from d05  
Mean Depth=19.20



PD4781: Annotated with VAF from d01  
Mean Depth=15.99



PD4781: Annotated with VAF from d17  
Mean Depth=16.46



PD4781: Annotated with VAF from c22  
Mean Depth=14.29

