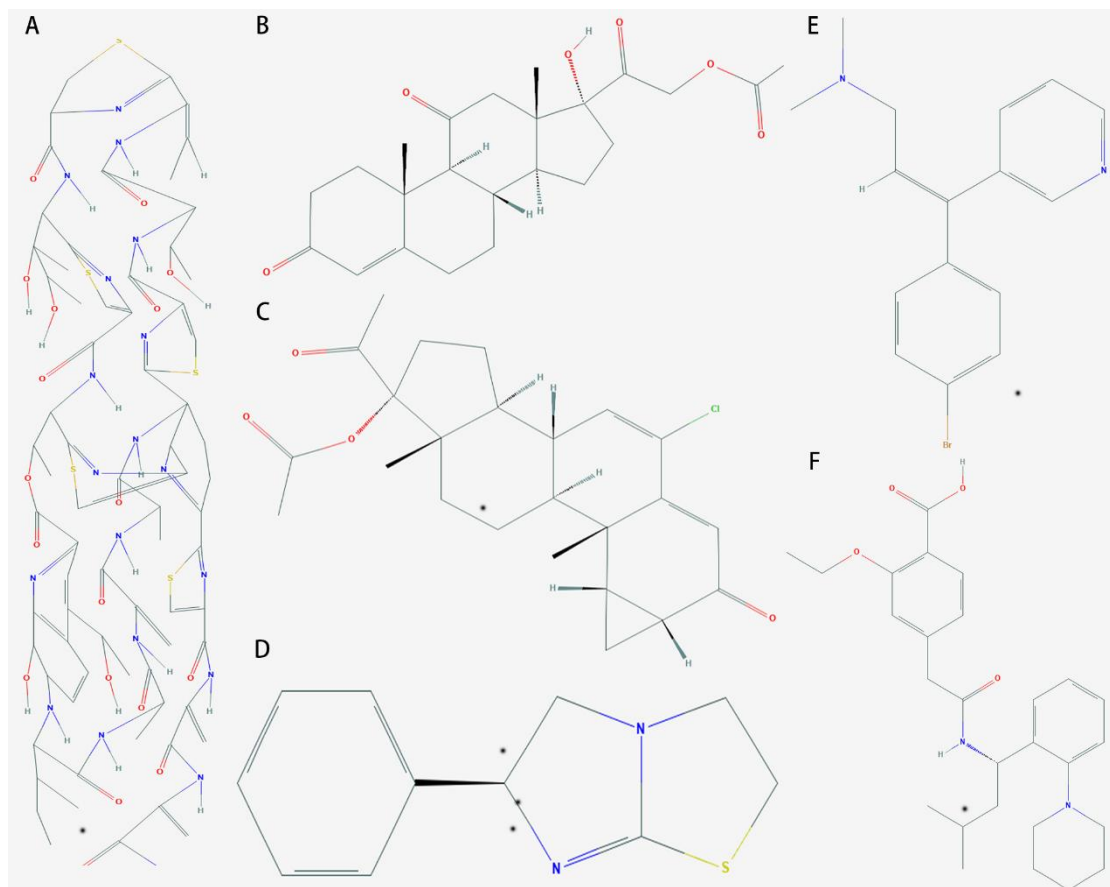
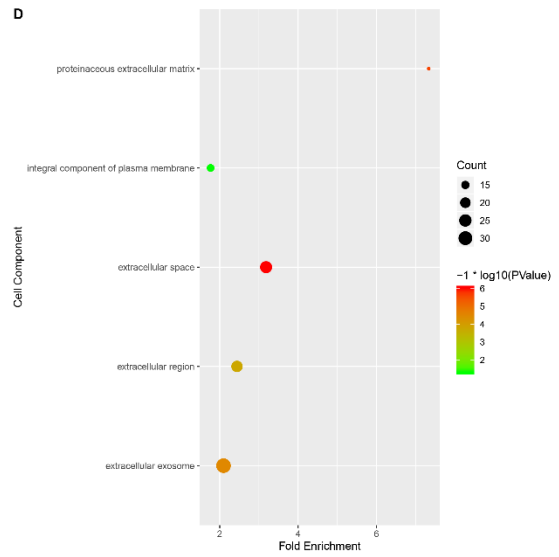
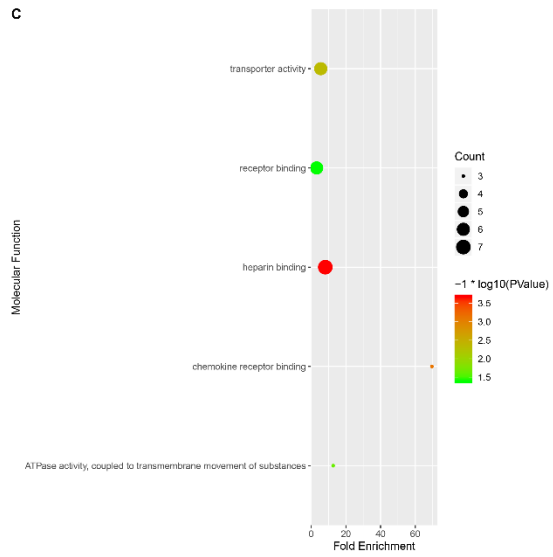
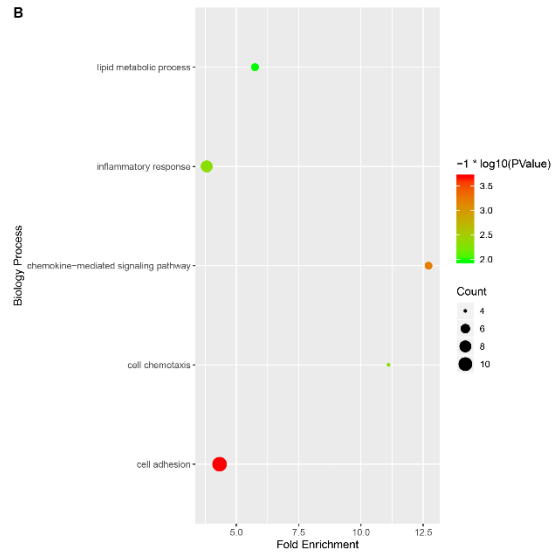
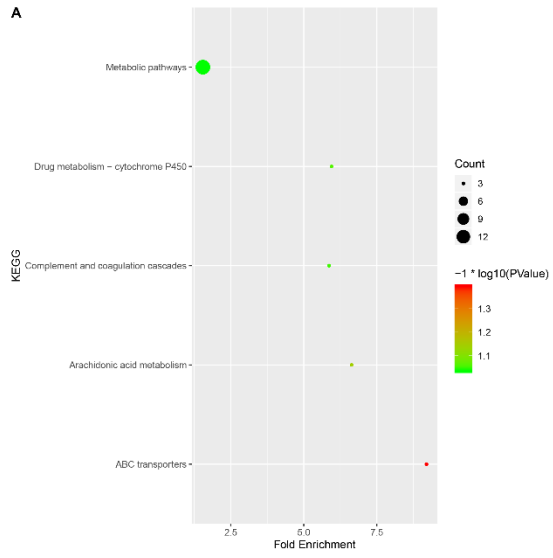


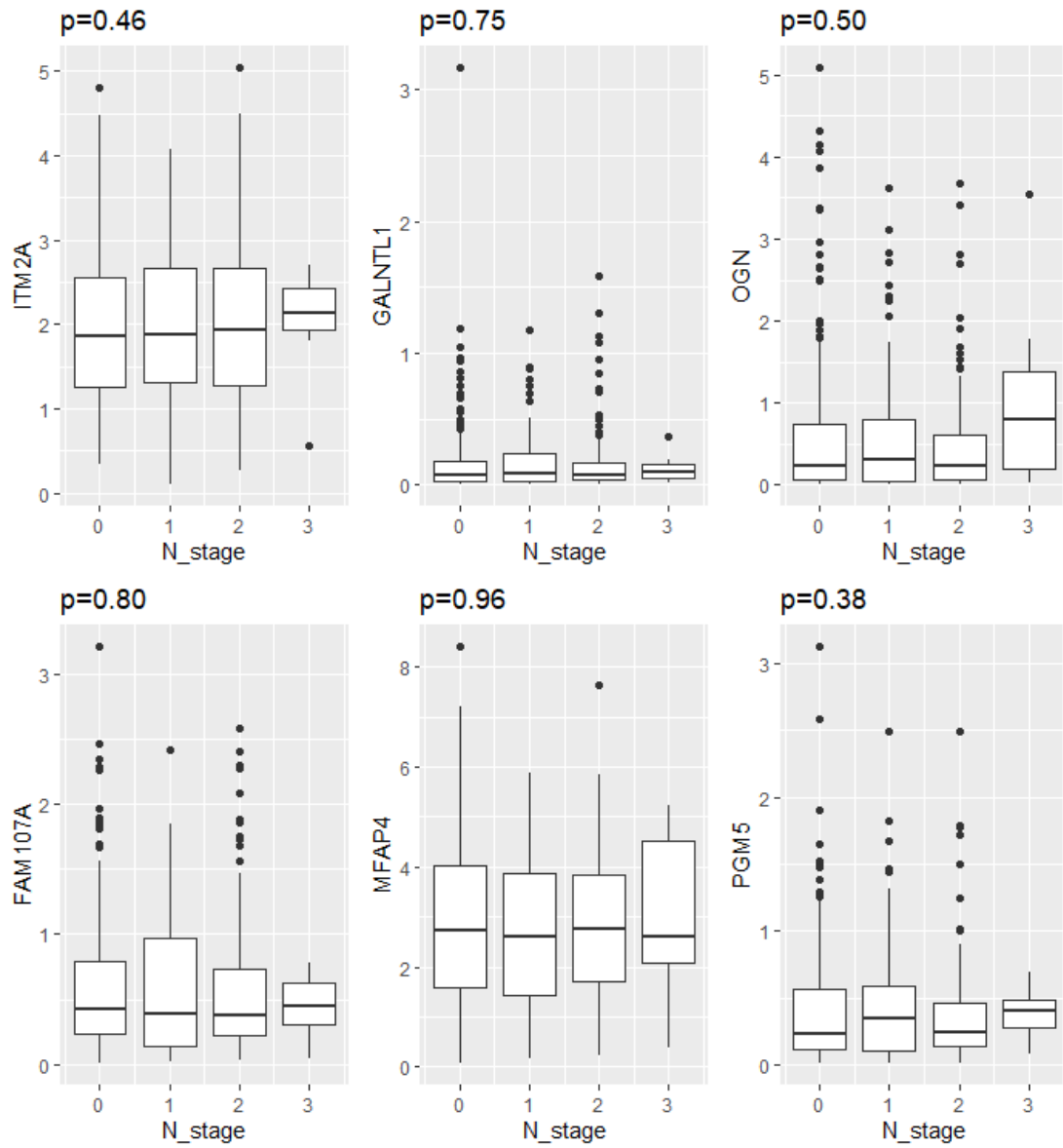
Supplementary Fig 1 2D molecular Structure of potential drugs. A: thiostrepton B: cortisone C: cyproterone D: levamisole E: zimeldine F: repaglinide



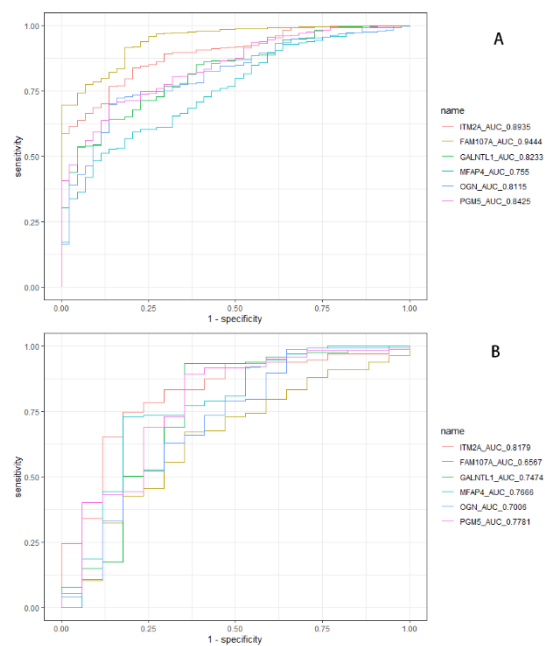
**Supplementary Fig 2 GO and KEGG analysis of blue module.** A: The correlation between blue module and KEGG pathway. B: The correlation between blue module and GO terms of biological process. C: The correlation between blue module and GO terms of molecular function. D: The correlation between blue module and GO terms of cellular component.



Supplementary Fig 3 The correlation between hub genes and tumor N-stage.

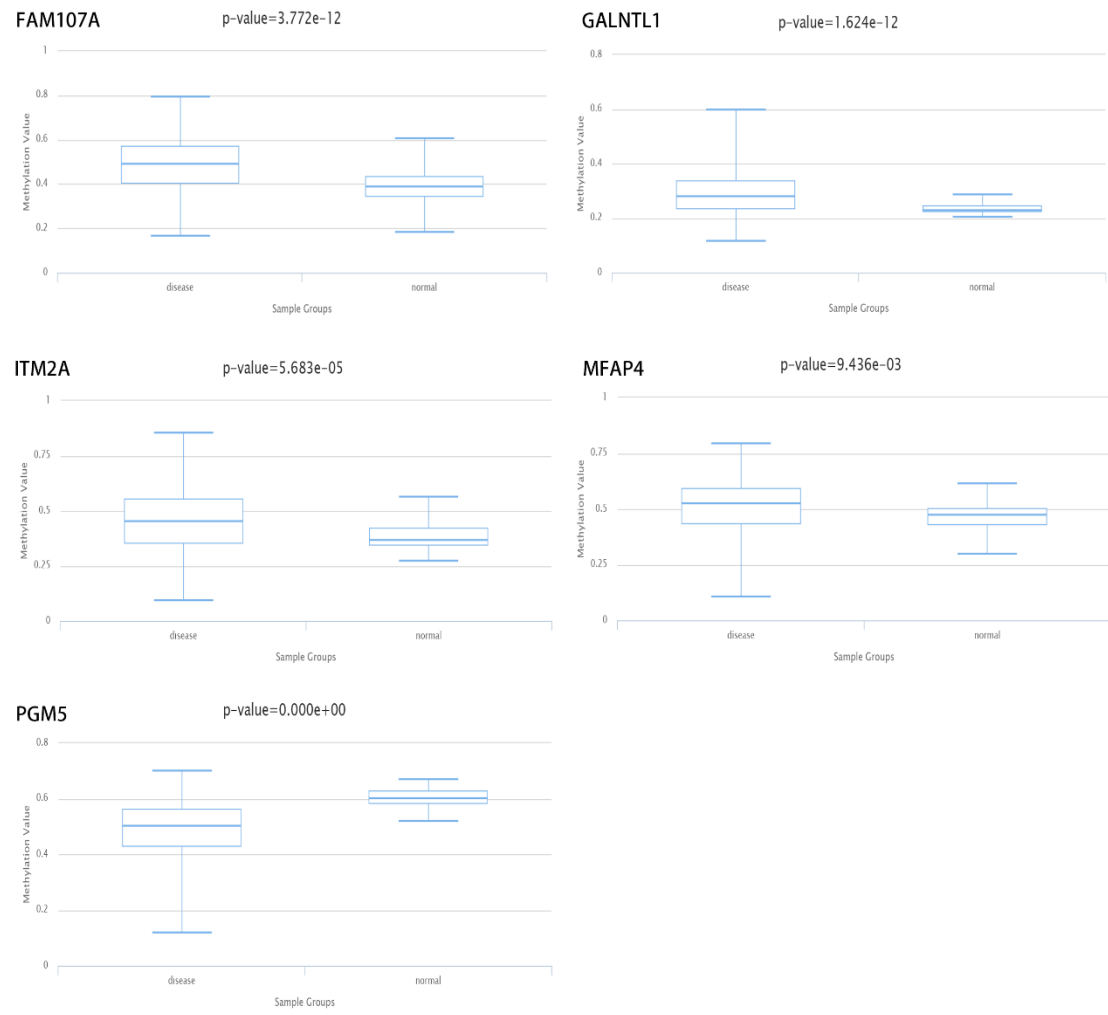


**Supplementary Fig 4 ROC curves validate the diagnostic role of hub genes. A:** Diagnostic role of hub genes between normal tissue and tumor tissue. **B:** Diagnostic role of hub genes between tumor tissue and dysplasia tissue.



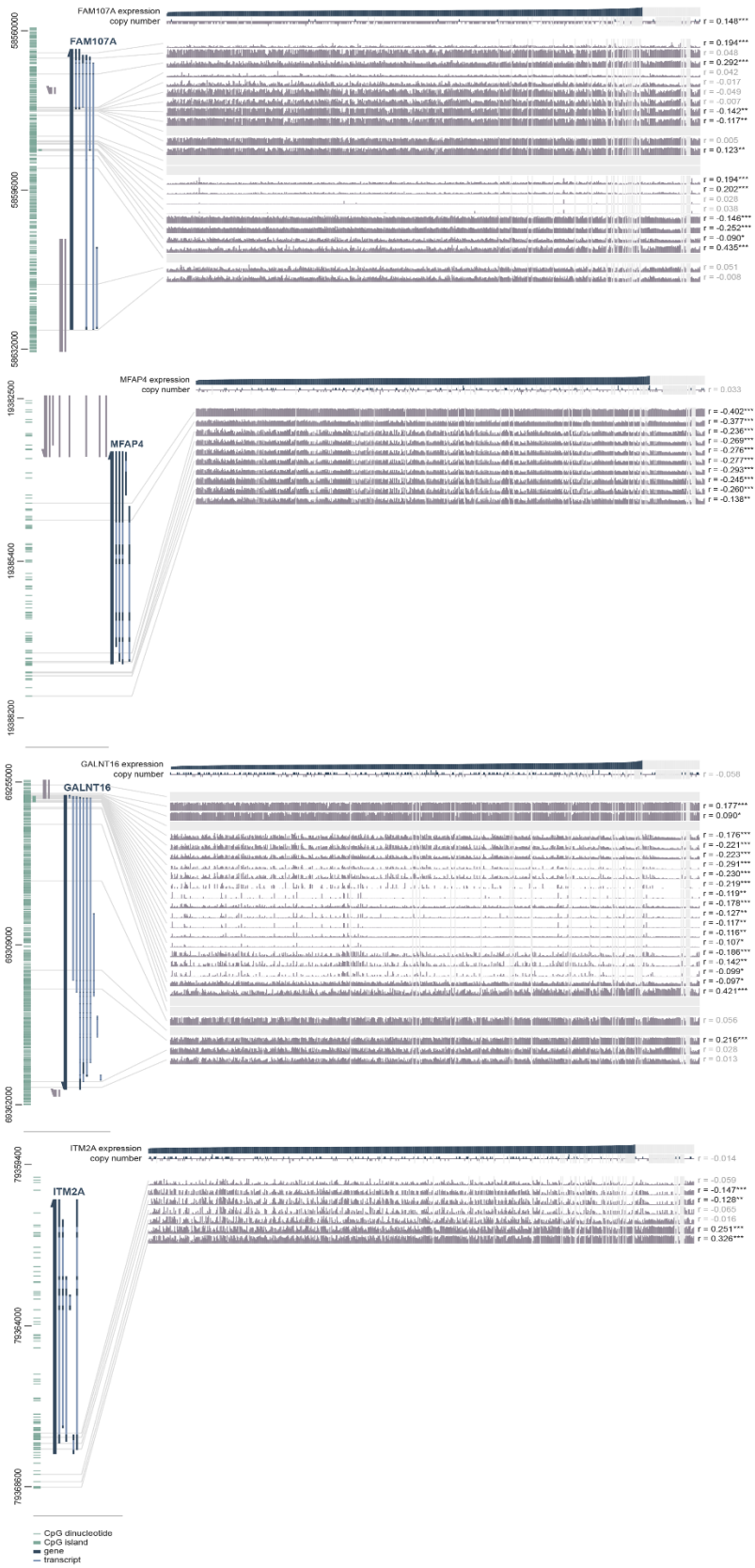


## Supplementary Fig 5 Mean methylation level of hub genes between normal and tumor tissue



**Supplementary Fig 6 The relationship between four hub genes and their methylation site**





Supplementary Fig 7 GSEA result of hub genes.

