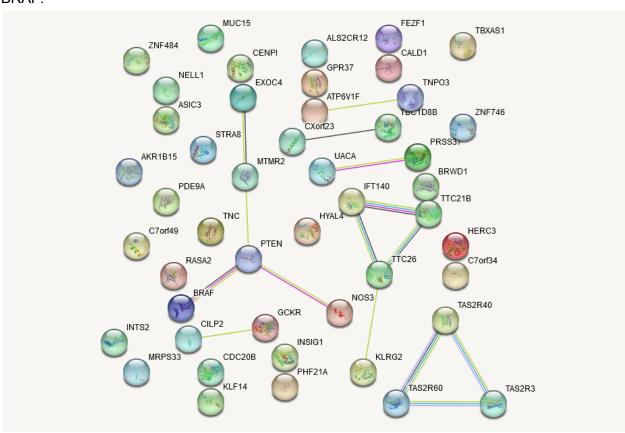
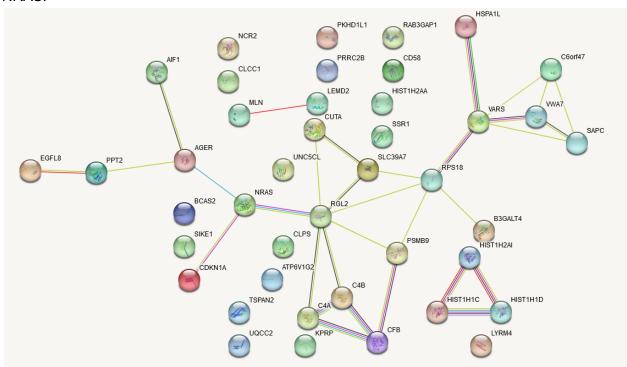
Khan Inan Professor Truong BI-GY 7683

1. The top 5 enriched mutated genes in BRAF are TNPO3, EXOC4, GPR37, PSS37, and ASIC3. The top 5 enriched mutated genes for NRAS are BCAS2, RAB3GAP1, AGER,PPT2-EGFL8 and SLC39A7. based on narrowing down the alteration types, I was able to determine that inframe mutations (inframe insertion and deletion) are one of the mutation types that are exclusive to NRAS, and I was unable to find a specific mutation type that only BRAF has and NRAS does not

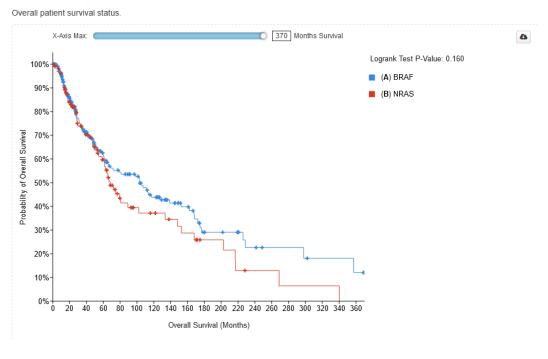
## 2. BRAF:



## NRAS:



3. After narrowing it down to 10 interactors I can see that genes NRAS is more likely to mutate than BRAF, I deduced this because NRAS has more orbs with lines and just overall seems more interconnected. The survival pattern for these to groups is shown below



Looking at the survival rate we can see that NRAS has a lower survival rate than BRAF and I would say that this is consistent with the string networks because it makes sense that the melanoma group that is more likely to mutate have a higher chance to also kill.