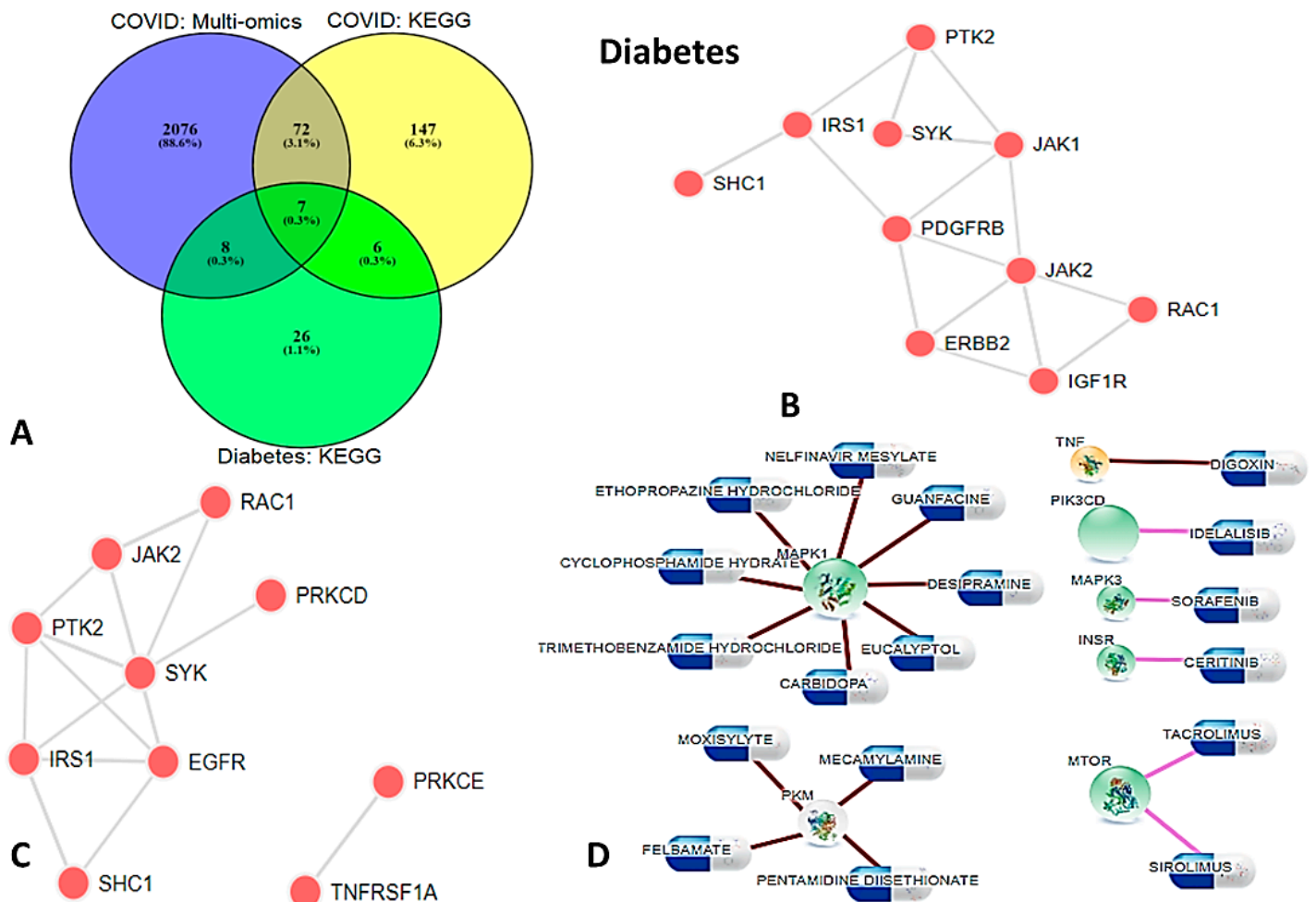
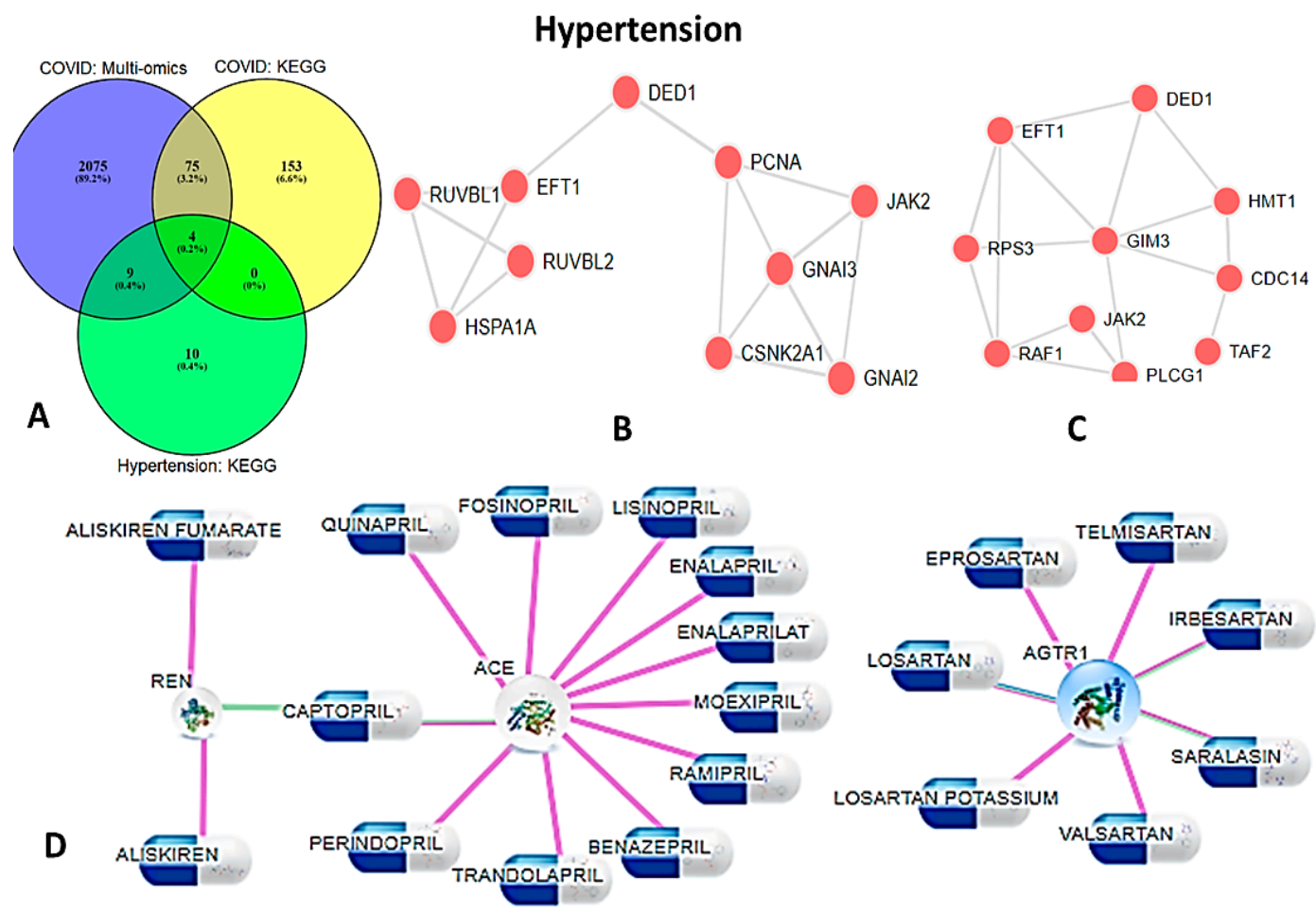


## Supplementary Figures

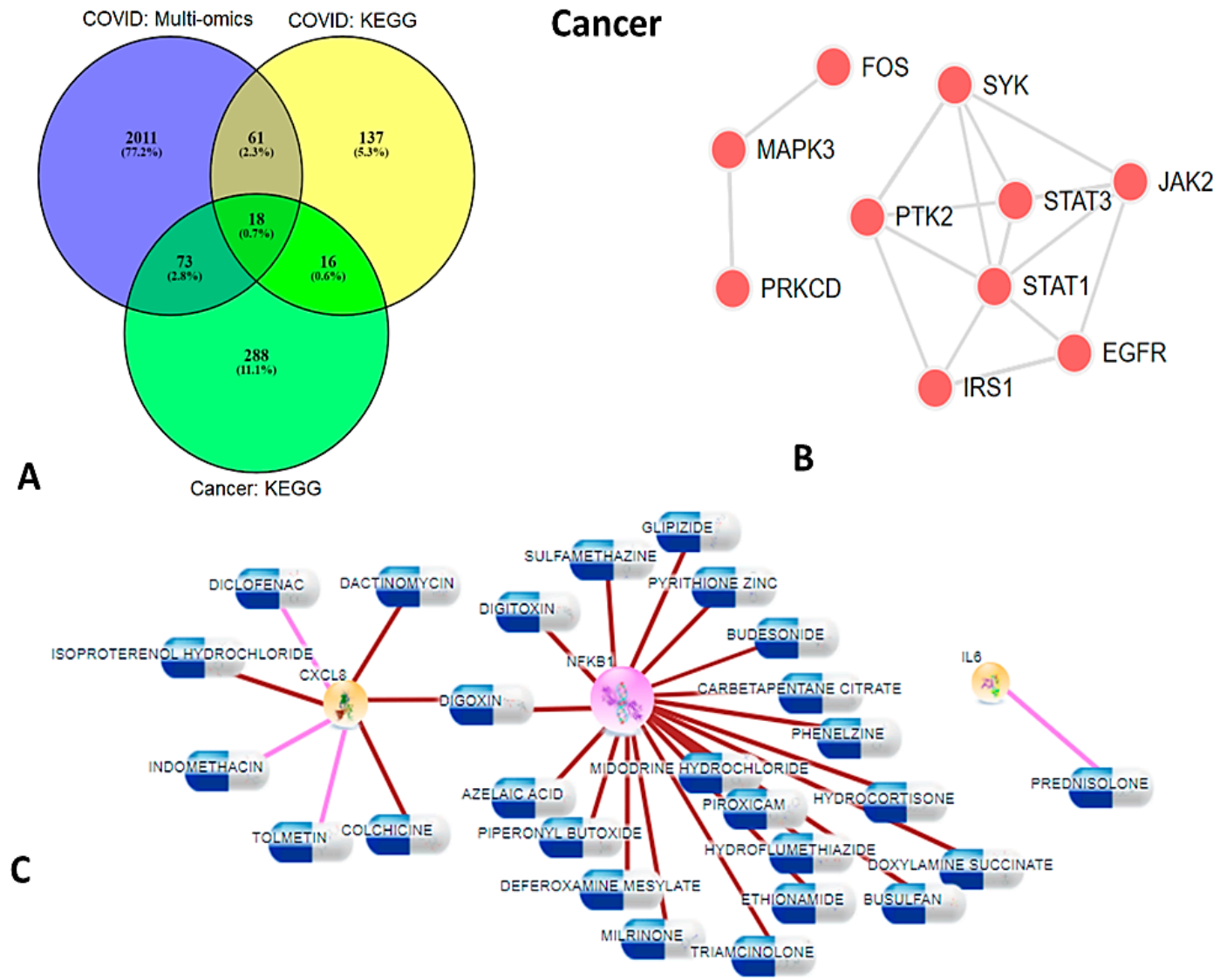
**Fig-S1: Pathway crosstalks between diabetes and COVID-19.** (A) The shared genes. (B) The hub-genes among the shared 21 genes. (C) The hub-genes among the core seven shared genes. (D) Identified targets and the FDA-approved drugs against these targets.



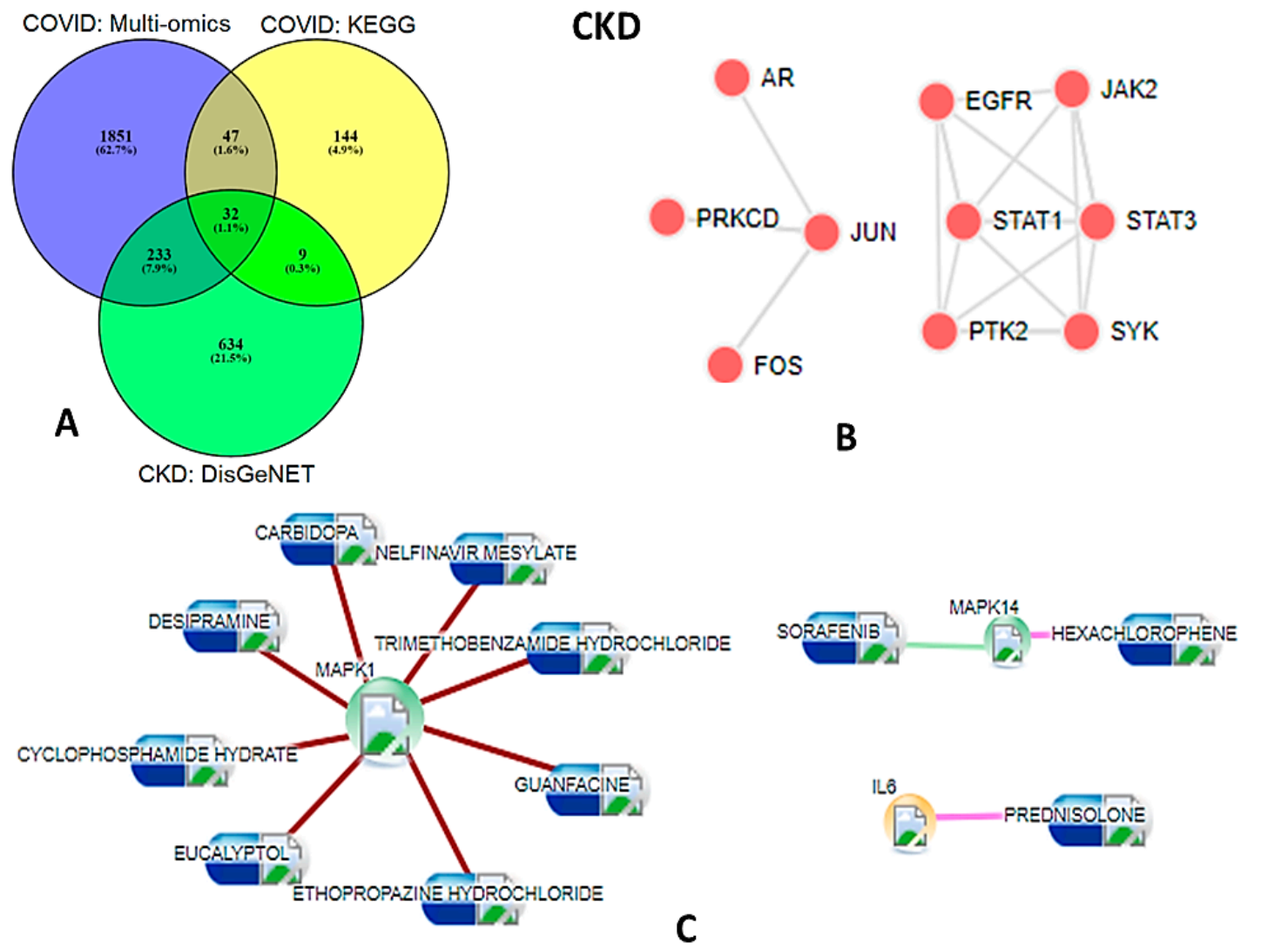
**Fig-S2: Pathway crosstalks between hypertension and COVID-19.** (A) The shared genes. (B) The hub-genes among the shared 13 genes. (C) The hub-genes among the core seven shared genes. (D) Identified targets and the FDA-approved drugs against key targets.



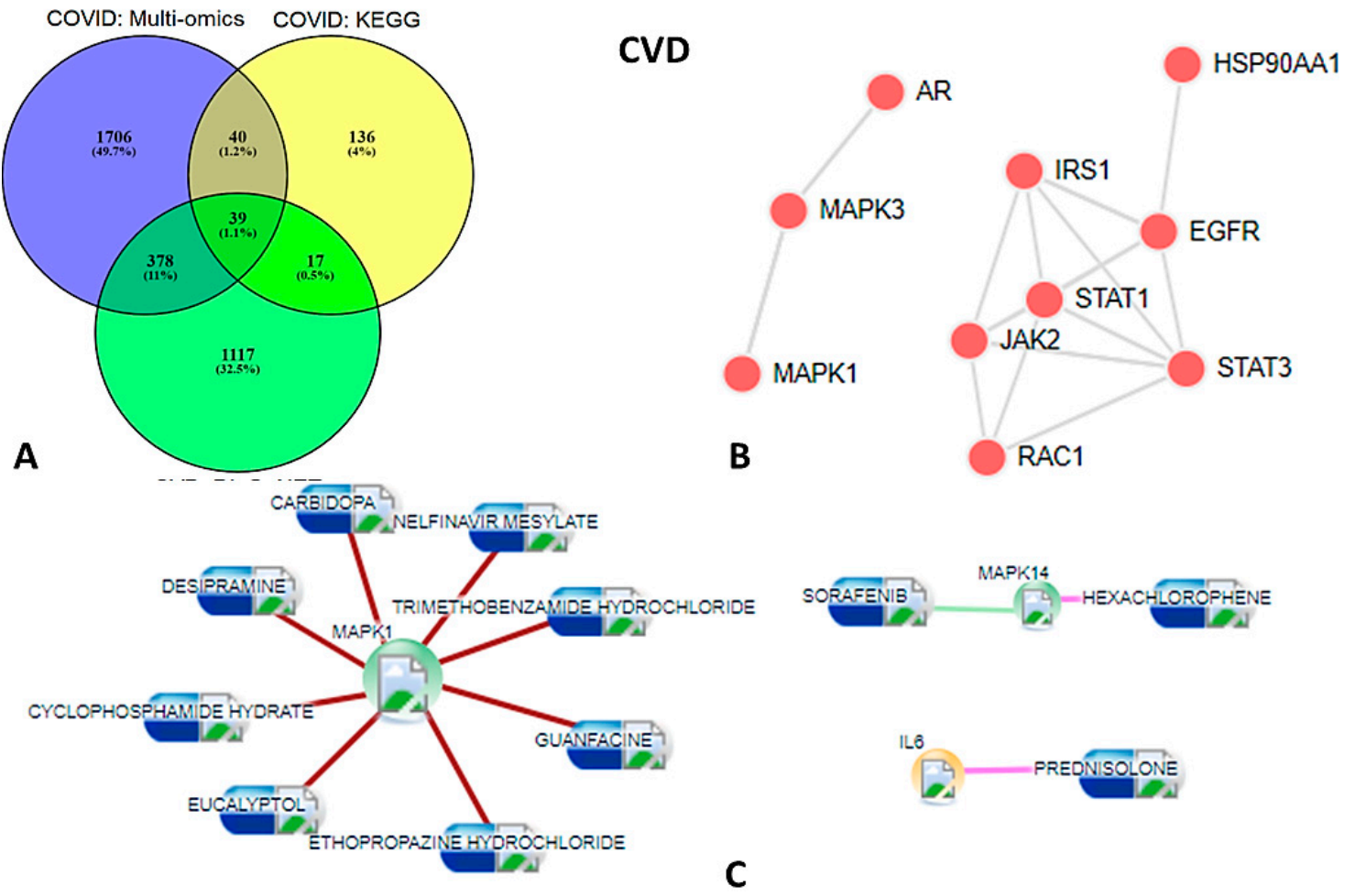
**Fig-S3: Pathway crosstalks between cancer and COVID-19.** (A) The shared genes. (B) The hub-genes among the core 18 shared genes. (C) Identified targets and the FDA-approved drugs against these targets.



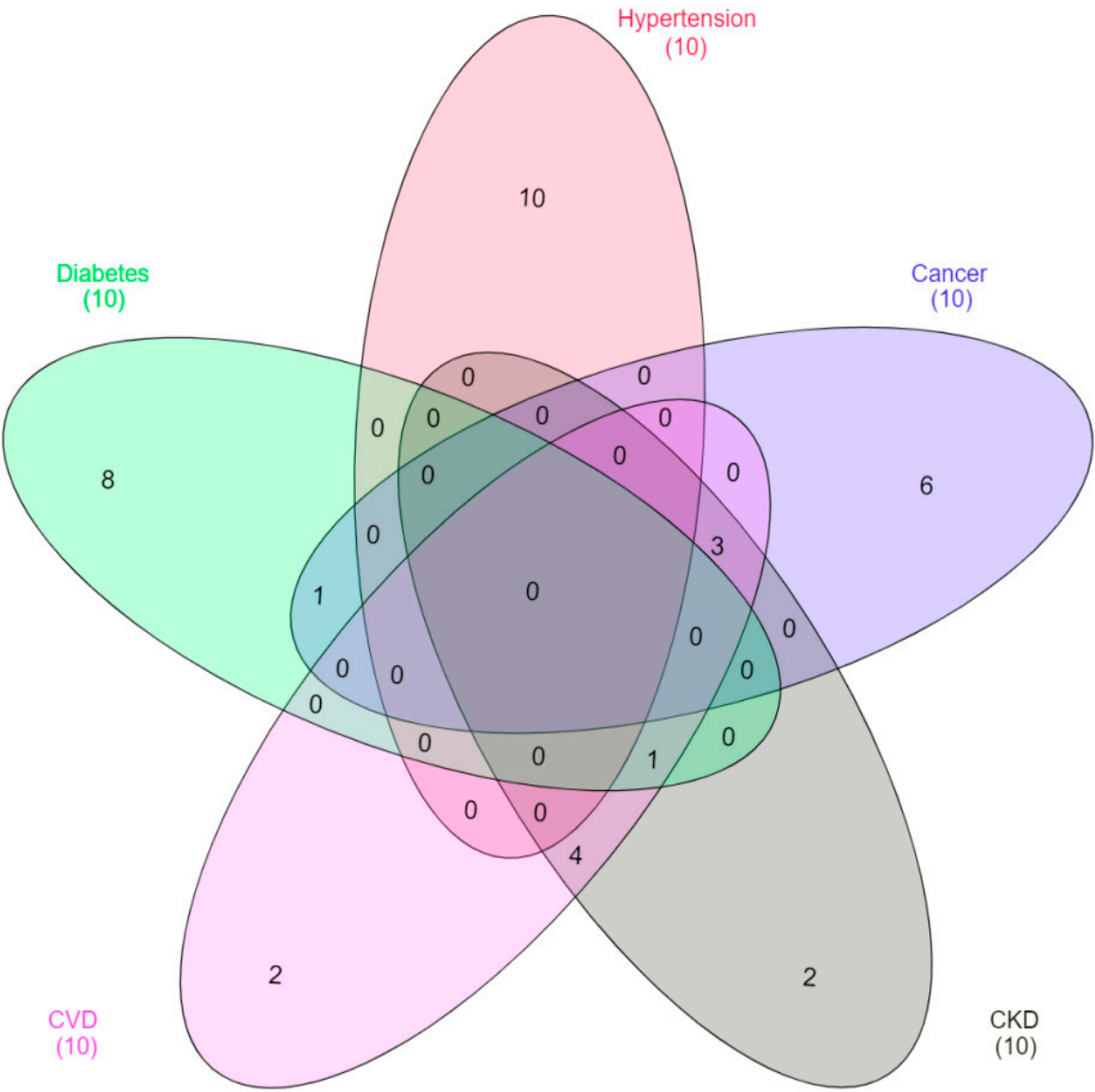
**Fig-S4: Pathway crosstalks between CKDs and COVID-19.** (A) The shared genes. (B) The hub-genes among the core 32 shared genes. (C) Identified targets and the FDA-approved drugs against these targets.



**Fig-S5: Pathway crosstalks between CVDs and COVID-19.** (A) The shared genes. (B) The hub-genes among the core 39 shared genes. (C) Identified targets and the FDA-approved drugs against these targets.

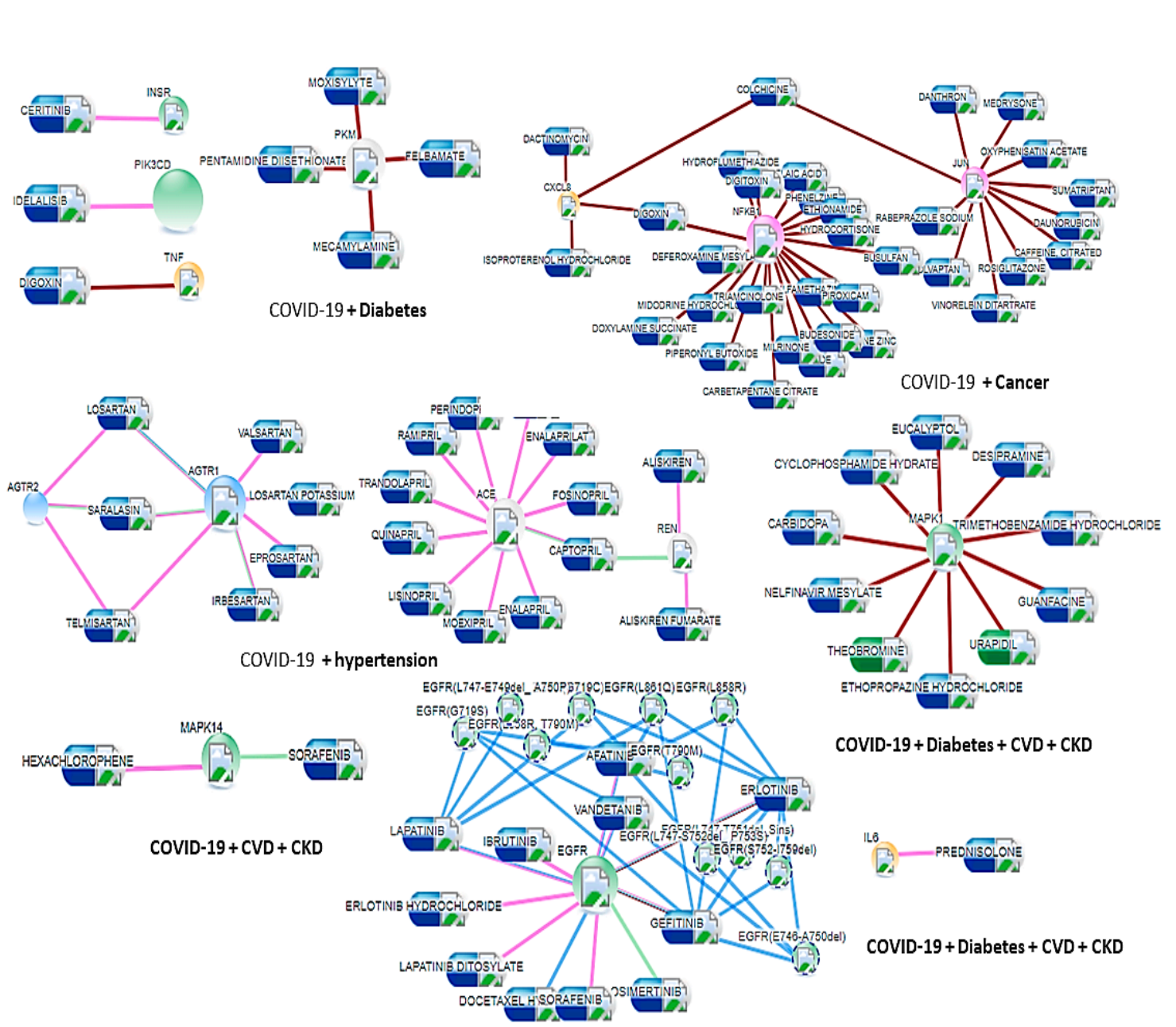


**Fig-S6:** Venn diagram showing the individual and common targets from shared pathways. Top 10 targets of each comorbid conditions associated with COVID-19 were used in this analysis.

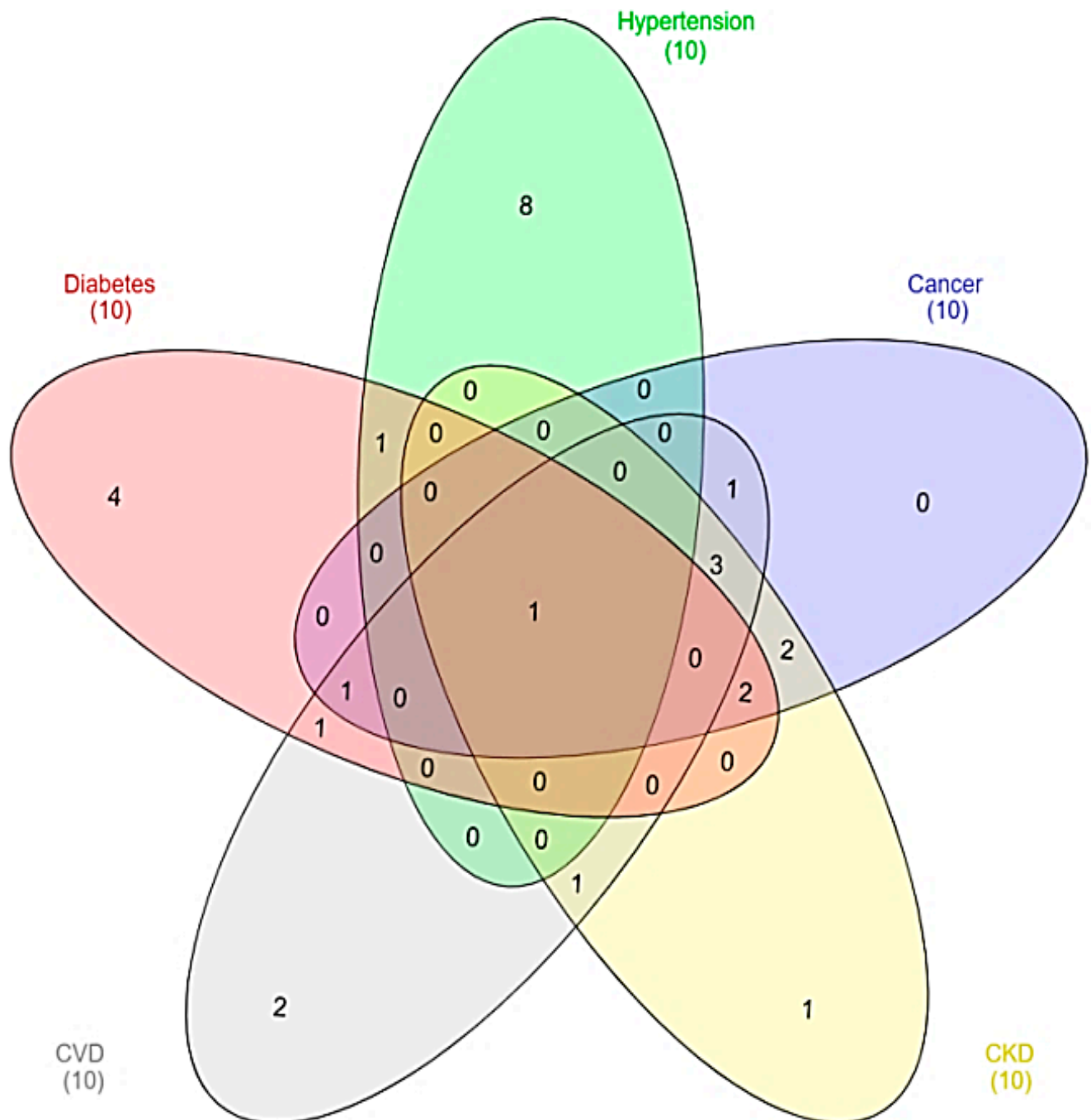




**Fig-S7:** Individual and common targets from shared pathways and approved drugs against these targets.



**Fig-S8:** Venn diagram showing the individual and common targets from hub-gene analysis. Top 10 hub genes from each comorbid condition associated with COVID-19 were used in this analysis.





**Fig-S9:** Approved drugs associated with the hub-gene targets. Drugs for individual and combinations of comorbidities in COVID-19 are presented.

