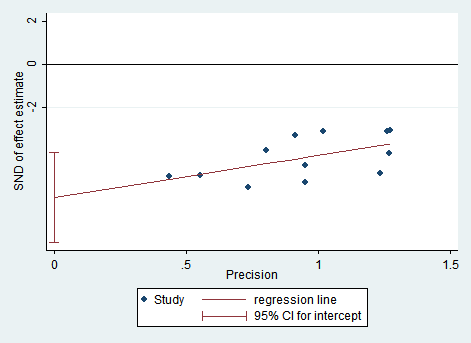
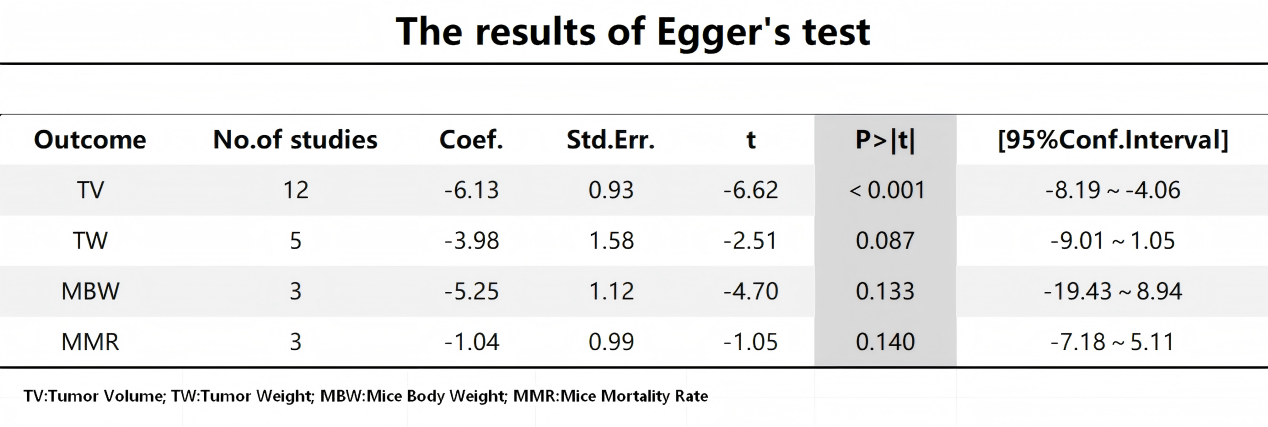
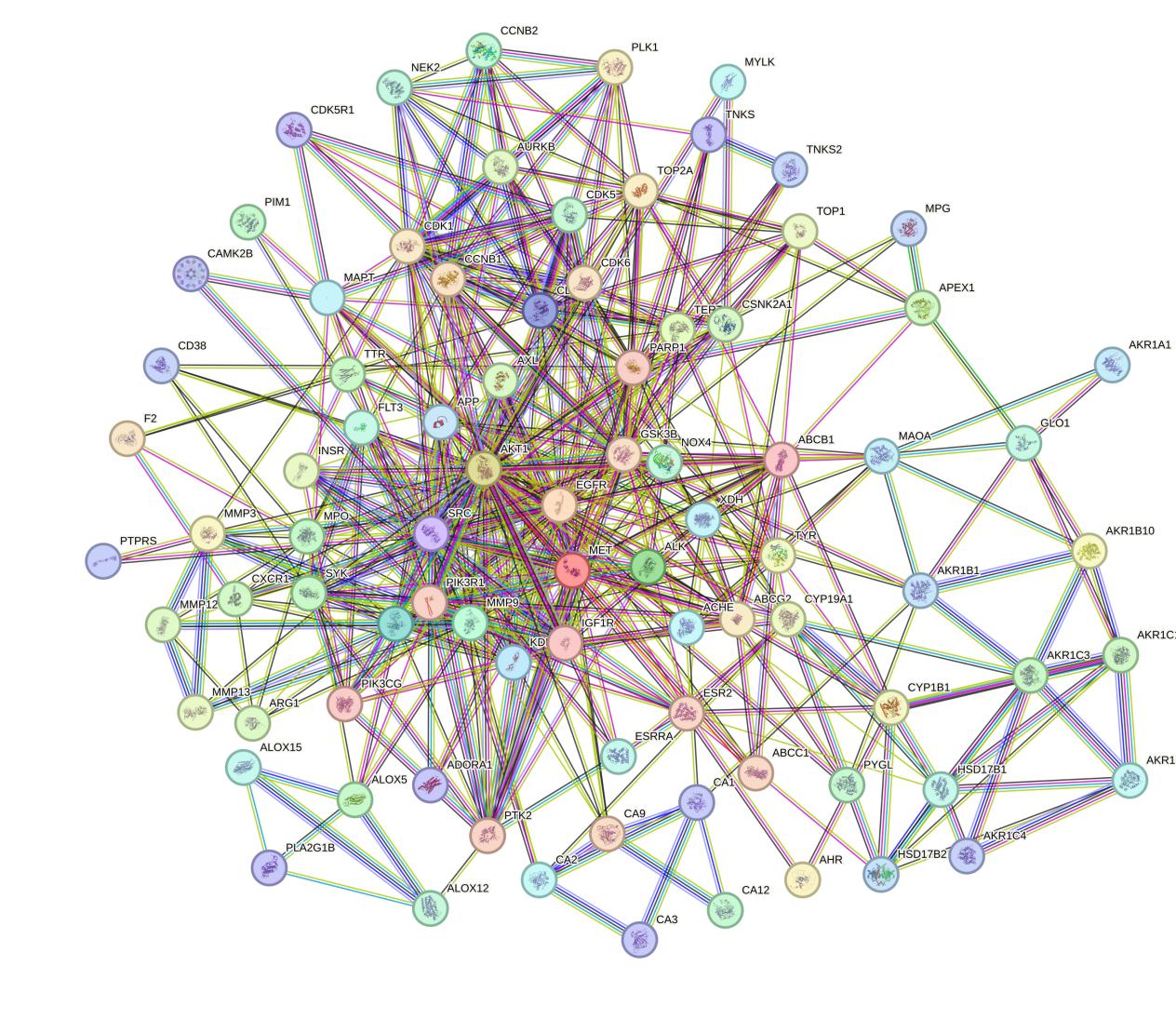
**Supplementary Table 1** Search strategies and full search strings across databases

|  |  |  |
| --- | --- | --- |
| **Database** | **SearchField** | **SearchString** |
| **PubMed** | MeSH Terms+Title/Abstract | ("Quercetin"[MeSH Terms] OR "quercetin"[Title/Abstract]) AND ("Hepatocellular Carcinoma"[MeSH Terms] OR "hepatocellular carcinoma"[Title/Abstract] OR "HCC"[Title/Abstract] OR "liver cancer"[Title/Abstract]) AND ("2000/01/01"[PDAT]:"2024/08/31"[PDAT]) |
|
| **Scopus** | Title,Abstract,Keywords | TITLE-ABS-KEY (quercetin)AND TITLE-ABS-KEY (("hepatocellular carcinoma"OR "HCC"OR "liver cancer")) AND PUBYEAR>1999 AND PUBYEAR<2025 AND LANGUAGE("english") AND DOCTYPE("ar") |
|
| **Web** **of Science** | Topic (Title, Abstract, Keywords, Keywords Plus) | TS = (quercetin)AND TS = (("hepatocellular carcinoma" OR "HCC"OR "liver cancer")) AND PY = (2000-2024) AND LA=(English)AND DT=(Article) |
| **ScienceDirect** | Title, Abstract, Keywords | ("quercetin") AND ("hepatocellular carcinoma"OR "HCC"OR "liver cancer") AND (PUBYEAR>=2000 AND PUBYEAR<=2024) AND (LANGUAGE:"English") AND (ARTICLE TYPE:"Journal Article") |
| **Cochrane Library** | Title, Abstract, Keywords | ("quercetin"AND ("hepatocellular carcinoma"OR"HCC"OR "liver cancer")) AND (publication year:2000 to 2024) AND (language:English)AND (study type:"randomized controlled trial"OR "systematic review"OR "original article") |
|

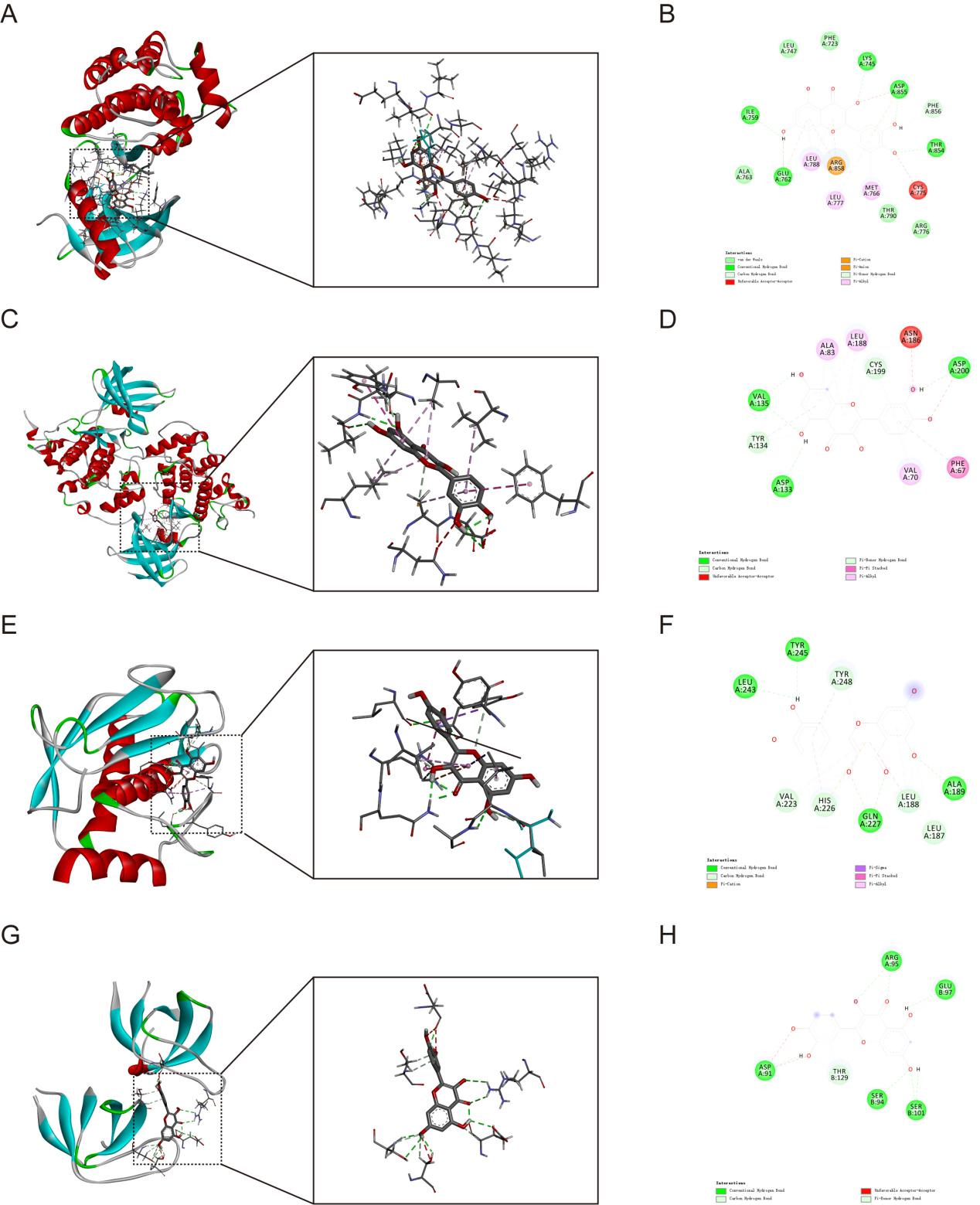
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**Supplementary Fig. 1** Egger’s test for tumor volume

**Supplementary Fig. 2** The Egger’s test P-value for tumor volume**.**



**Supplementary Fig. 3** The protein-protein interaction (PPI) network of these intersection targets was acquired via the STRING databas



**Supplementary Fig. 4** Molecular docking results of EGFR, GSK3β, MMP9, and SRC with QT. （A-B）3D and 2D diagrams of molecular docking results between EGFR and QT, with a docking energy of -8.8 kcal/mol. （C-D）3D and 2D diagrams of molecular docking results between GSK3B and QT, with a docking energy of -8.5 kcal/mol. (E-F) 3D and 2D diagrams of molecular docking results between MMP9 and QT, with a docking energy of -10.7 kcal/mol. (G-H) 3D and 2D diagrams of molecular docking results between SRC and QT, with a docking energy of -8.0 kcal/mol.