

OMTO, Volume 30

## **Supplemental information**

### **Smoking induces WEE1 expression to promote docetaxel resistance in esophageal adenocarcinoma**

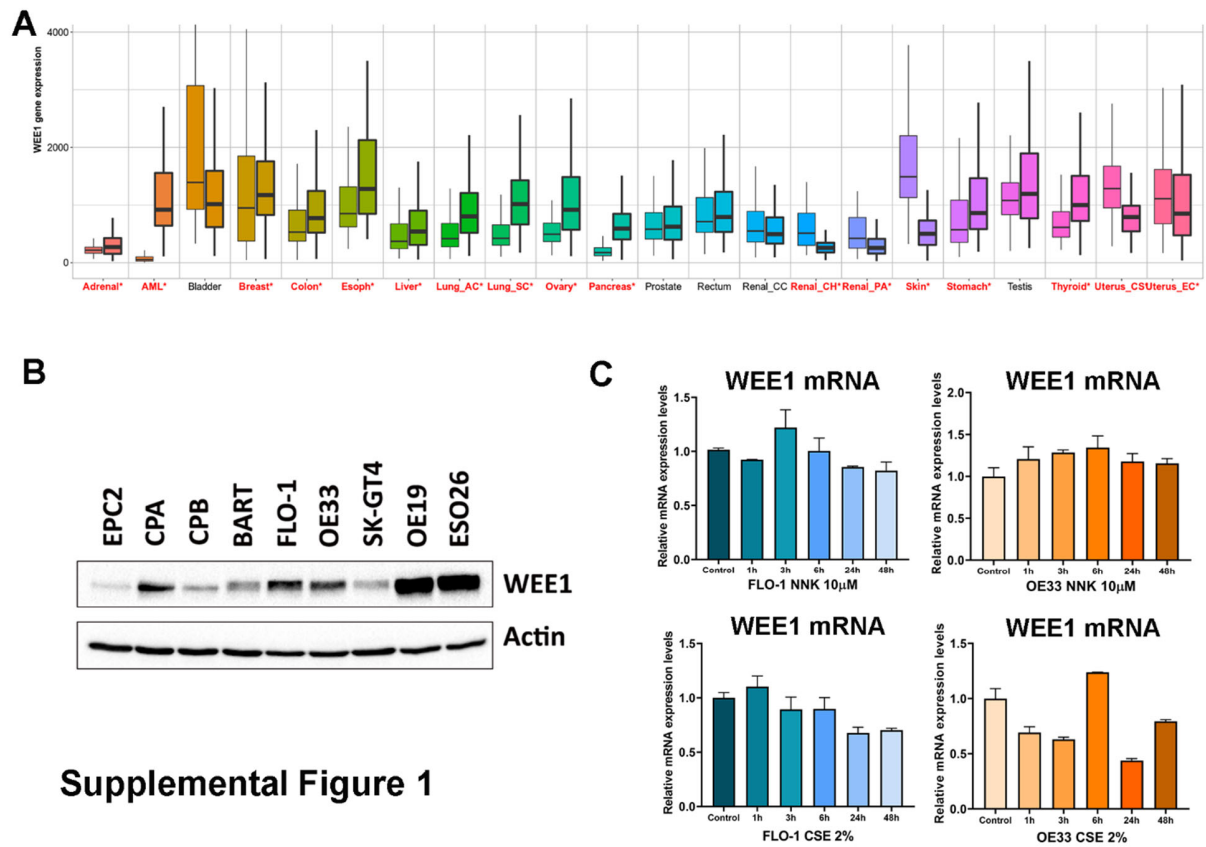
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**Table S1. Primers used for qRT-PCR**

Primers	sequence
WEE1-forward	AGGGAATTTGATGTGCGACAG
WEE1-reverse	CTTCAAGCTCATAATCACTGGCT
Universal miRNA forward	GCGAGCACAGAATTAATACGAC
miR-191	CAACGGAATCCCAAAAGCAGCTG
miR-129-3p	AAGCCCTTACCCCAAAAAGTAT
miR-195-5p	TAGCAGCACAGAAATATTGGC

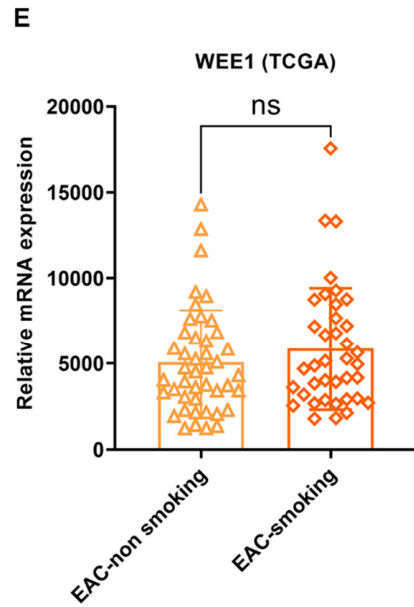
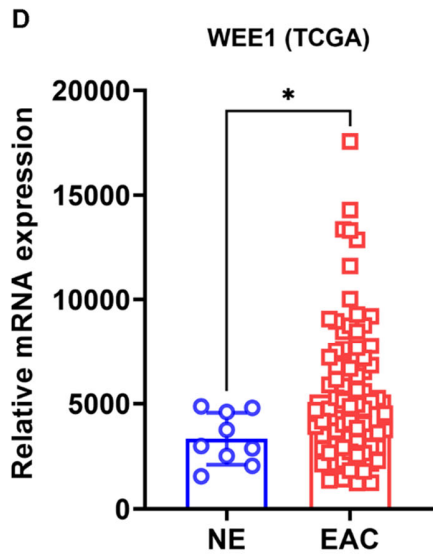
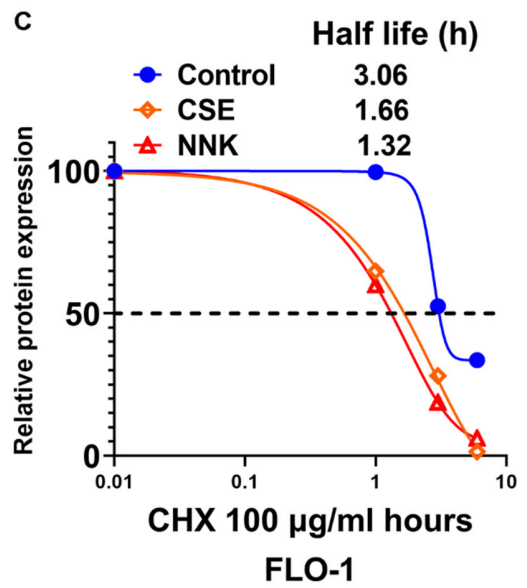
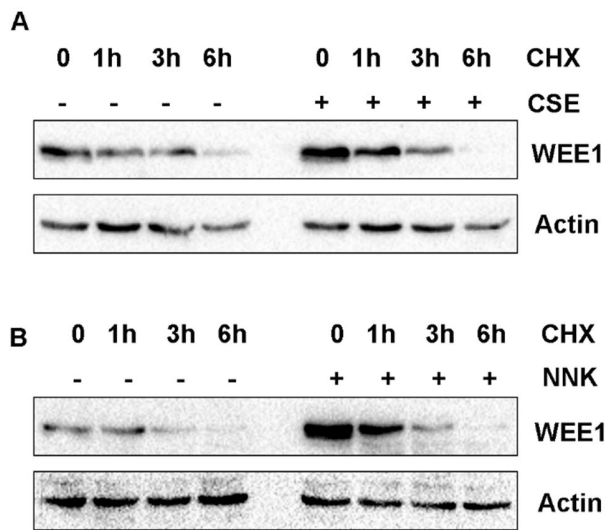
**Table S2. Predicted miRNAs that can target WEE1**

miRNA	miRNA	miRNA
hsa-miR-195-5p	hsa-miR-216a-3p	hsa-miR-381-3p
hsa-miR-106a-5p	hsa-miR-23a-3p	hsa-miR-424-5p
hsa-miR-106b-5p	hsa-miR-23b-3p	hsa-miR-497-5p
hsa-miR-128-3p	hsa-miR-27a-3p	hsa-miR-503-5p
hsa-miR-15a-5p	hsa-miR-27b-3p	hsa-miR-519d-3p
hsa-miR-15b-5p	hsa-miR-300	hsa-miR-520a-3p
hsa-miR-16-5p	hsa-miR-302a-3p	hsa-miR-520c-3p
hsa-miR-17-5p	hsa-miR-302b-3p	hsa-miR-520d-3p
hsa-miR-19b-3p	hsa-miR-302d-3p	hsa-miR-526b-3p
hsa-miR-20a-5p	hsa-miR-302e	hsa-miR-6838-5p
hsa-miR-20b-5p	hsa-miR-373-3p	hsa-miR-93-5p



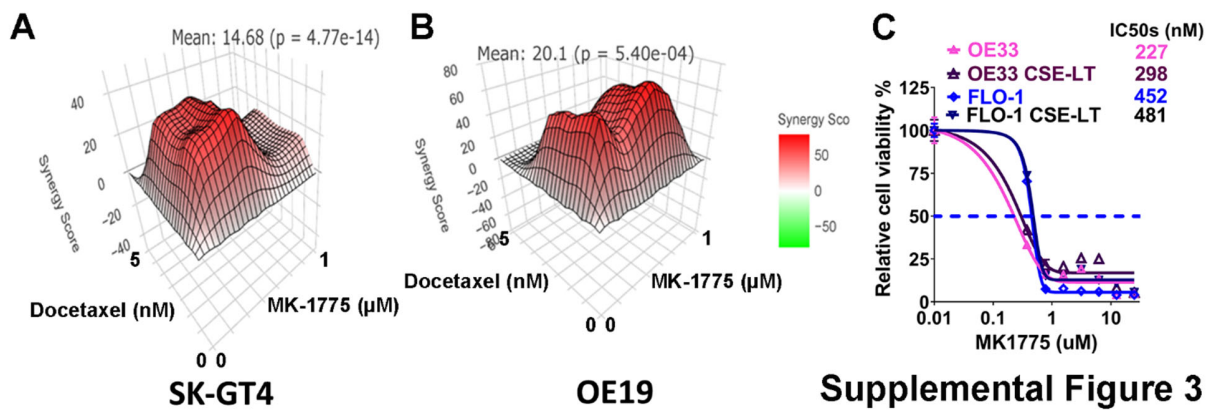
**Supplemental Figure 1**

**Figure S1.** A. WEE1 mRNA expression in 22 human cancers. Red color\* indicates significant differences in WEE1 expression. B. WEE1 baseline expression in esophageal cells. C. WEE1 mRNA expression levels after NNK and CSE treatment in FLO-1 and OE33 cells.



Supplemental Figure 2

**Figure S2.** A&B. Western blot analysis of WEE1 and  $\beta$ -actin expression in FLO-1 control and smoking-treated cells treated with Cycloheximide (CHX 100  $\mu$ g/ml) for 0, 1, 3, and 6 hours. C. Quantification of protein half-life from A&B. D. WEE1 relative mRNA expression in TCGA normal esophagus (NE), and esophageal adenocarcinoma (EAC) samples. E. WEE1 relative mRNA expression in TCGA EAC smoking and non-smoking patient samples.



**Figure S3.** A&B. SynergyFinder analysis in SK-GT4 and OE19 cells with MK-1775 and docetaxel treatment. C. IC50 of MK-1775 in FLO-1 and OE33 control or CSE-LT cells.