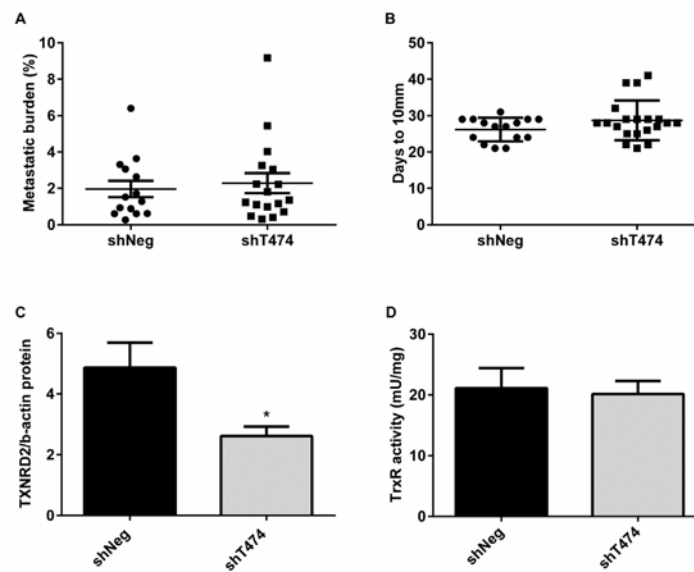
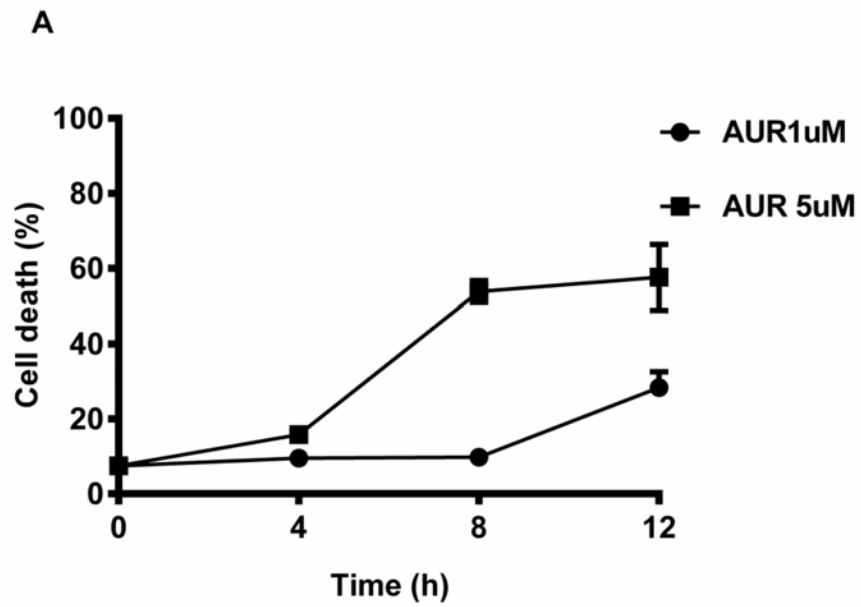


SUPPLEMENTARY FIGURES AND TABLE



Supplementary Figure S1: TXNRD1 compensates for activity in TXNRD2 knockdown. **A.** Metastatic burden and **B.** primary tumour growth of TrxR2-silenced cells (shT474) is unchanged in an orthotopic mouse model of OS. **C.** Immunoblot quantification of TrxR2 protein knockdown in the tumours in (A) and (B), corrected for B-actin expression. * $P < 0.05$. **D.** Total thioredoxin activity in the TrxR2 knockdown cells is unchanged.



Supplementary Figure S2: Time course of auranofin-induced apoptosis in OS cells. KHOS cells were treated with 1 and 5 μ M AF over 12 hours to determine the highest level of cell death as measured by Annexin-V and PI staining.

Supplementary Table S1: Top 19 genes overexpressed in a comparative transcriptomic analysis of highly and poorly metastatic clonal variants of OS

Gene	Symbol	B statistic	FC
Stanniocalcin 2	STC2	12.53	6.81
Cadherin 2, type 1, N-cadherin (neuronal)	CDH2	15.63	6.45
Paired related homeobox 1	PRRX1	8.13	5.07
Vascular endothelial growth factor A	VEGFA	13.26	4.17
S100 calcium binding protein A4	S100A4	8.93	4.12
Growth differentiation factor 15	GDF15	8.18	3.77
Oral cancer overexpressed 1	ORAOV1	8.06	2.99
Integrin, beta 2	ITGB2	9.29	2.97
Protease, serine, 3	PRSS3	6.16	2.90
Potassium voltage-gated channel, subfamily F, member 1	KCNF1	6.86	2.84
Ankyrin repeat and SOCS box containing 1	ASB1	10.37	2.73
Leupaxin	LPXN	6.96	2.65
ATPase, class II, type 9A	ATP9A	9.03	2.59
Placenta-specific 8	PLAC8	5.43	2.55
Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	TAP1	8.24	2.53
Laminin, beta 3	LAMB3	5.38	2.52
Transmembrane protein 200A	TMEM200A	7.87	2.34
Chloride intracellular channel 6	CLIC6	7.62	2.28
Thioredoxin reductase 2	TXNRD2	4.71	2.19

Illumina gene names and symbols are listed. A B-statistic > 3 indicates a 95% chance that the gene is truly differentially expressed. FC = fold change.