

Table SI. Summary of quercetin nanoparticles designed for hepatocellular carcinoma treatment.				
First author/s, year	Nanocarrier	Targeting ligand /Receptors	Therapeutic efficacy	Ref.
Ren <i>et al</i> , 2017	Quercetin nanoparticle	No specific targeting ligand/receptors	Quercetin nanoparticles enhanced the inhibitory role in liver cancer progression through multiple routes of action, including caspase/Cyto-c activation, AP-2 β /hTERT inhibition, NF- κ B/COX-2 and Akt/ERK1/2 suppression.	(48)
Guan <i>et al</i> , 2016	Quercetin-loaded poly (lactic- <i>co</i> -glycolic acid)-d- α -tocopheryl polyethylene glycol 1000 succinate nanoparticles	No specific targeting ligand/receptors	Quercetin nanoparticles were more targeted to liver <i>in vivo</i> and had improves antitumor efficacy.	(49)
Srisa-nga <i>et al</i> , 2018	Superparamagnetic polymeric micelles loaded with quercetin	Cellular magnetic targeting	Quercetin nanoparticles accumulated markedly within the liver cancer cells and increased the cytotoxicity of liver cancer cells due to co-delivery of superparamagnetic iron oxide nanoparticles.	(50)
Wang <i>et al</i> , 2016	RGD peptide targeted lipid coated nanoparticles for combinatorial delivery of sorafenib and quercetin	RGD	RGD peptide modified nanoparticles (loading of quercetin and sorafenib) was	(51)

			more effective against HCC due to its efficient targeting.	
Pradhan <i>et al</i> , 2019	Quercetinencapsulated biodegradable plasmonic nanoparticles	No specific targeting ligand/receptors	Quercetin-loaded and gold-coated liposomes had an efficient effect to induce the apoptotic death of cancer cells by suppressing Hsp70 expression and also had a marked effect to trigger the disorganization of the microtubules network and DNA damage.	(54)
Varshosaz <i>et al</i> , 2014	Quercetin-loaded solid lipid nanoparticles	No specific targeting ligand/receptors	Quercetin-loaded solid lipid nanoparticles had good inhibitory effects against HepG2 cells.	(55)
Cyto-c, cytochrome c; AP-2 β , activating enhancer-binding protein-2 β ; hTERT, human telomerase reverse transcriptase; NF- κ B, nuclear factor-kappaB; COX-2, cyclooxygenase-2; RGD, Arginylglycylaspartic acid; HCC, hepatocellular carcinoma; DNA, Deoxyribonucleic acid; HepG2, human hepatoblastoma cell line.				

Table II. Summary of quercetin nanocarriers designed for P-gp inhibition.

First author/s, year	Compound with quercetin	Target ABC transporters/enzymes	Effect	Ref.
Mu <i>et al</i> , 2019	Quercetin conjugated chitosan nano-micelles	P-glycoprotein	Inhibition of P-glycoprotein efflux	(75)
Guo <i>et al</i> , 2022	PTX/PTS/HQ PNPs	P-glycoprotein	Inhibition of P-glycoprotein efflux	(76)
Yu <i>et al</i> , 2019	Adriamycin and quercetin-coencapsulated liposome	P-glycoprotein	Inhibition of P-glycoprotein efflux	(77)
Wang <i>et al</i> , 2014	Amphiphilic carboxymethyl chitosan-quercetin conjugate	P-glycoprotein	Inhibition of P-glycoprotein efflux	(78)
Khonkarn <i>et al</i> , 2020	Quercetin-loaded micelles	P-glycoprotein	Inhibition of P-glycoprotein efflux	(79)
Mu <i>et al</i> , 2019	QT-CA-CS-DOX nanomicelles	P-glycoprotein	Inhibition of P-glycoprotein efflux	(80)
Kumar <i>et al</i> , 2018	Quercetin-absorbed multiwalled carbon nanotubes	P-glycoprotein	Inhibition of P-glycoprotein efflux	(81)
Qian <i>et al</i> , 2021	Polyethyleneimine- Tocopherol Hydrogen Succinate/Hyaluronic Acid-Quercetin (PEI-TOS/HA-QU) Core-Shell Micelles	P-glycoprotein	Inhibition of P-glycoprotein efflux	(82)

PTX/PTS/HQ PNPs, paclitaxel/polyethyleneimine-tocopherol hydrogen succinate-dithioglycolic acid/hyaluronic acid-quercetin polymeric nanoparticles; QT-CA-CS-DOX, quercetin-citraconic anhydride-chitosan-doxorubicin.