

<b>Molecule</b>	<b>Mechanism of action</b>	<b>Liver dysfunction</b>	<b>Renal dysfunction</b>
<i>Antibodies</i>			
Cetuximab	Anti-EGFR	-	-
Nimotuzumab	Anti-EGFR	-	-
Panitumumab	Anti-EGFR	-	-
Trastuzumab	Anti-HER 2/neu	-	-
Rituximab	Anti-CD20	-	-
Ofatumumab	Anti-CD20	-	-
Alemtuzumab	Anti-CD52	-	-
Bevacizumab	Anti-VEGF	-	-
<i>Small molecules</i>			
Gefitinib	EGFR TKI	-	-
Erlotinib	EGFR TKI	Dose reduction for severe liver dysfunction (S.Bilirubin 3xULN)	-
Imatinib	Anti-BCR ABL kinase Anti- c-KIT. Anti-SCF, Anti-PDGFR	25% dose reduction for severe hepatic impairment. Omit if S.Bilirubin>3mg% or SGOT>5xULN	50% dose reduction for moderate renal impairment.
Sorafenib	VEGFR, PDGFRb TKI, c-Raf, b-Raf intracellular TKI	Not used for Child Pugh C	Not used for severe renal dysfunction
Sunitinib	VEGFR, PDGFRb , c-KIT, FLT-3, RET,CSF-1R RTKI	Not used for Child Pugh C	-
Everolimus	mTOR kinase Inhibitor	Dose reduction for Child-Pugh B Do not use for Child-Pugh C	-
Temsirolimus	mTOR kinase Inhibitor	Dose reduction for mild liver dysfunction	-
Dasatinib	Anti-BCR ABL kinase, Anti-SRC family kinases, Anti-c-KIT, Anti-PDGFRb	-	-

Olaparib		-	-
Lapatinib	HER 1 & 2 TKI	Dose reduction for Child Pugh C	-
Pazopanib	Multi-kinase inhibitor (VEGFR, PDGFR, c-KIT, FGFR, IL-2, LcK, c-Fms)	Dose reduction for moderate dysfunction. Omit for severe dysfunction	-
Bortezomib	26S proteasome inhibitor	-	-
Lenalidomide, Thalidomide	Immunomodulatory effect (stimulates T cell proliferation, IFN- $\gamma$ & IL-2 production, inhibits TNF- $\alpha$ & IL-6 production), Anti-angiogenic effect (anti-VEGFR, anti-bFGF)	-	Caution
Vandetanib	EGFR, VEGFR, RET, BRK, SRC family TKI	--	-

Disease	Drug	Liver dysfunction	Renal dysfunction
<i>Metastatic Prostate Cancer</i>			
	Goserelin	-	-
	Leuprolide	-	-
	Flutamide	Contraindicated for	-

		moderate liver dysfunction	
	Bicalutamide	Caution. Dose reduction for S. Bilirubin>3mg%	-
	Docetaxel	Caution. Omit if S.Bilirubin>1.5 mg% or SGOT>60 mg% or ALP>2.5 ULN	-
	Cabazitaxel	Contraindicated	Caution in c/o severe renal impairment
	Estramustine	Contraindicated for severe liver dysfunction	-
	Abiraterone acetate	75% dose reduction for moderate liver impairment. Not used for severe hepatic impairment.	-
	Aminoglutethemide	-	-
<b><i>Metastatic Breast Cancer</i></b>			
	Doxorubicin	Dose reduction. Omit for S.Bilirubin>5mg%	-
	Epirubicin	Dose reduction	50% dose reduction for severe renal dysfunction
	Paclitaxel	Dose reduction.	-

		Contraindicated for severe liver dysfunction (S.Bilirubin>5mg%)	
	Docetaxel	Caution. Omit if S.Bilirubin>1.5 mg% or SGOT>60 mg% or ALP>2.5 ULN	-
	Abraxane	Caution	-
	Cyclophosphamide	25% dose reduction if S.Bilirubin>3.5 mg% or SGOT>180 mg%. Omit if S.Bilirubin>5mg %	Dose reduction
	5FU	Dose reduction for severe liver dysfunction	-
	Gemcitabine	-	-
	Carboplatin	-	Dose reduction
	Ixabepilone	Dose reduction for mild liver dysfunction. Contraindicated for severe liver dysfunction	-
	Tamoxifen	Caution	-
	Anastrozole	-	-
	Letrozole	Dose reduction for severe liver dysfunction	-
	Exemestane	-	-
	Fulvestrant	50% dose reduction for	-

		moderate liver dysfunction. Not used for severe liver dysfunction.	
<b><i>Metastatic Ovarian Cancer</i></b>			
	Paclitaxel	Dose reduction. Contraindicated for severe liver dysfunction (S.Bilirubin>5mg%)	-
	Docetaxel	Caution. Omit if S.Bilirubin>1.5 mg% or SGOT>60 mg% or ALP>2.5 ULN	-
	Cisplatin	-	Dose reduction
	Carboplatin	-	Dose reduction
	Gemcitabine	-	-
	Liposomal Doxorubicin	Dose reduction. Omit for S.Bilirubin>5mg%	-
	Altretamine	-	-
	Etoposide	Dose reduction. Omit if S.Bilirubin>3 mg % or SGOT>180 mg%	Dose reduction
<b><i>Metastatic Colorectal Cancer</i></b>			
	5FU	Omit for S.Bilirubin>	Dose reduction for severe

		5mg%	renal dysfunction
	Capecitabine	Monitor for moderate-to-severe liver dysfunction	25% dose reduction for moderate renal dysfunction. Not used in severe renal dysfunction
	Irinotecan	-	-
	Oxaliplatin	-	Omit if CrCl<20ml/min
<b><i>Metastatic NSCLC</i></b>			
	Docetaxel	Caution. Omit if S.Bilirubin>1.5 mg% or SGOT>60 mg% or ALP>2.5 ULN	-
	Paclitaxel	Dose reduction. Contraindicated for severe liver dysfunction (S.Bilirubin>5mg%)	-
	Gemcitabine	-	-
	Cisplatin	-	Dose reduction
	Carboplatin	-	Dose reduction
	Pemetrexed	-	Dose reduction
	Vinorelbine	Dose reduction Omit for S.Bilirubin>5mg%	-

