

## SUBJECT INDEX TO VOLUME 6

- Aglaiastatin ..... 339  
 synthesis of ..... 339
- Angiogenesis ..... 287,504  
 vasculature of ..... 504
- Angiotensin ..... 452  
 as growth factor ..... 452  
 as inducer of apoptosis in vivo ..... 454  
 cytostatic effects due to inhibition of ..... 453  
 drug mediators of ..... 453  
 proapoptotic effects of ..... 455
- Angiotensin I converting enzyme inhibitors ..... 451  
 cystostatic effects of ..... 456  
 deployment of ..... 451  
 in cancer chemotherapy ..... 451  
 inhibition as protector of normal tissues in  
 radiation oncology ..... 457
- Angiotensin II ..... 451  
 physiology of ..... 451
- Ansamycins ..... 2
- 1,4-Anthracenedione analogs ..... 303  
 activities of ..... 313  
 antitumor activities of ..... 303  
 molecular targets of ..... 303  
 synthesis of ..... 303,306
- Antiangiogenesis ..... 288  
 in cancer therapy ..... 288
- Anti-angiogenic cancer therapy ..... 407  
 based on integrin avb3 antagonism ..... 407  
 disintegrins based ..... 410  
 peptides based ..... 410  
 small molecule integrin antagonists based ..... 410
- Anticancer agent ..... 19  
 gold(I) coordination complexes as ..... 22  
 gold(III) coordination complexes as ..... 25
- Anticancer drugs ..... 514  
 bioavailability of ..... 519  
 effect of drug release rate of ..... 516  
 multiple injections of ..... 520  
 sustained release formulations of ..... 514
- Anticancer target ..... 378  
 rationale for CHK1 as ..... 378
- Anti-carcinogenic agents ..... 53  
 antiestrogens as ..... 68  
 bisphosphonate as ..... 66  
 COX-2 inhibitors as ..... 68  
 CYP24 inhibitors as ..... 65  
 phytoestrogens as ..... 68  
 retinoids as ..... 66  
 SERMs as ..... 68  
 vitamin D analogs as ..... 53
- Antiotensin II type I/type 2 receptor blocker ..... 451  
 deployment of ..... 451  
 in cancer chemotherapy ..... 451
- Anti-VEGF therapy ..... 287  
 aptamers in ..... 295  
 bevacizumab in ..... 292  
 monoclonal antibodies in ..... 292  
 nucleic acid-based drugs in ..... 287  
 ranibizumab in ..... 293  
 role of biotech in ..... 287  
 siRNA in ..... 298  
 VEGF aptamer in ..... 297
- Aplidin ..... 38
- Apoptosis ..... 41,598  
 in terms of QSAR ..... 41
- Aromatase ..... 221  
 and CYP19 gene ..... 222  
 effect of cyclooxygenase inhibitors on ..... 228  
 in breast cancer ..... 223  
 inhibitors for ..... 224  
 relationship between cyclooxygenases ..... 221,228  
 tissue-specific gene expression of ..... 222
- ATPase inhibitors ..... 2  
 anti-cancer activities of ..... 2
- Betulinic acid ..... 271  
 modifications of ..... 273
- Betulinic acid derivatives ..... 271  
 as anticancer agents ..... 271  
 modifications of ..... 273  
 structure activity relationship (SAR) of ..... 271,273
- Bioconjugation ..... 251  
 as polymeric DDS ..... 251  
 optimized protein therapy by ..... 251
- Biodiversity ..... 367
- Blood vessels ..... 503  
 functional role in health/in disease ..... 503
- Boron-containing chlorines ..... 159  
 synthesis of ..... 159
- Boron neutron capture therapy (BNCT)..... 75,111,  
 127,145,167  
 arylboronic acid-based amino acid derivatives  
 for ..... 112,116  
 biodistribution/pharmacokinetics of ..... 87  
 boron-containing amino acids/peptides for ..... 80  
 boron-containing macromolecules for ..... 167  
 boron-containing porphyrins phthalocyanines  
 for ..... 82  
 boron-containing precursors of nucleic acids  
 for ..... 79  
 boron delivery agents for ..... 168  
 boronated antibodies/growth factors for ..... 85  
 boronated carbohydrates for ..... 82  
 dendrimer related delivery agents for ..... 169  
 dihydroxypropyl-substituted 3CTAs for ..... 132  
 EGFR targeted liposomes for ..... 177  
 ethyleneoxide-modified 3CTAs for ..... 132

folate receptor-targeted liposomes for .....	177	lipoxygenases inhibitors for .....	200
high molecular weight boron delivery agents for .....	168	multicomponent liposomal delivery system in.....	548
liposomes as boron delivery agents for .....	173	natural glyflavonoes in .....	351
low-density lipoproteins/liposomes for .....	87	natural Hibiscus esculentin in .....	353
low molecular weight delivery agents for .....	168	natural Piper species in .....	348
m-carborane-based amino acid derivatives for .....	123	natural Shiao-Chaihu-Tang in .....	355
nanovehicles as delivery agents for .....	167	natural StyraX egonols in .....	358
nucleoside substituted with carborane clusters for .....	128	new generation of liposomal drugs for .....	537
nucleosides for .....	127	pathobiology of VTE in patients with .....	580
o-carborane-based amino acid derivatives for .....	119	PGE2 signaling in .....	188
p-carborane-based amino acid derivatives for .....	123	pharmacokinetics/drug release in .....	538
polyhedral boron compounds for .....	76	PPARs ligands for .....	201
principles/requirements for .....	76	proliferation induced by PGE2 .....	188
role of epidermal growth factors (EGF) .....	170	synthetic aianthoidols in .....	358
three-carboranyl thymidine analogues (3CTAs) for .....	131	synthetic caffeic acid phenethyl ester in .....	351
types of boron carriers in .....	79	synthetic carpacins in .....	348
zwitterionic nido m-carboranyl 3CTAs for .....	132	synthetic flavonoids in .....	355
Boronated amino acids .....	111	synthetic neoflavonoids in .....	353
for boron neutron capture therapy .....	111	2,4,5-trihydrobenzaldehyde in .....	348
synthesis of .....	111	Uncaria tomentosa (cats claw) against .....	430
use of .....	111	VTE associated with .....	580
using boronic acids as boron source .....	112	Cancer cells .....	590
using carboranes as boron source .....	118	death of .....	590
Boronated nucleosides .....	127	Cancer chemoprevention .....	233
for boron neutron capture therapy .....	127	nimesulide analogues in .....	236
Boronated porphyrins .....	145	nimesulide in .....	233
biological evaluation of .....	145	NS-398 in .....	235
for boron neutron-capture therapy .....	145	Cancer chemotherapy .....	319
synthesis of .....	145	benzo[b]oxepines in .....	323
Boronated pyropheophorbide A derivatives .....	159	cyclopenta[bc]benzopyrans in .....	323
cell uptake of .....	159	Cancer therapy .....	255
Brain tumors .....	180	application of PVD for .....	255
delivery of boron containing macromolecules to .....	180	Carboranes .....	97
Breast cancer .....	221	antitumor activities of .....	97
cyclooxygenase inhibitors in .....	221	3-Carboranyl thymidine analogues (3CTAs) .....	127
non-steroidal anti-inflammatory drugs (NSAIDs) in .....	227	biological evaluation of .....	137
Caffeic acid phenethyl ester (CAPE) .....	347	for boron neutron capture therapy .....	127
Calcitriol backbone .....	61	Carboranylporphyrins .....	146
structural modification of .....	61	Cell-cycle checkpoints .....	377
Cancer .....	188,347,368,429,509,513,537,579	G1/S checkpoint as .....	377
anticoagulant treatment in .....	579,583	Cemadotin LU-103793 .....	36
cape-like analogues in .....	351	Chemotaxonomy .....	369
compounds with dimers/trimers/tetramers in .....	359	Chemotherapy .....	589
croton lechleri against .....	435,440	cell cycle control in .....	592
effect of East Asiatic folk medicinal plants .....	347	mitotic catastrophe in .....	589
EP receptors in .....	188	Chk1 inhibitors .....	377
epidemiology of thromboembolic disease in patients with .....	579	for novel cancer treatment .....	377
evaluation of natural/synthetic compounds in .....	347	peptide based .....	385
farnesyl transferase inhibitors (FTIs) for .....	198	peptidomimetic based .....	385
IFP lowering agents of .....	509	small molecule Chk1 inhibitors as .....	382
Lepidium meyenii against .....	431,439	structural basis for designing .....	379
		Chlorins .....	162
		COX-2 inhibition .....	239
		by diarylheterocycles .....	241
		by methanesulfonanilides .....	241
		clustering methods for .....	246

computational view of .....	239
2D-QSAR methods for .....	245
3D-QSAR methods for .....	244
indirect approach to .....	244
neural networks for .....	247
COX-2 inhibitors .....	209
in lung cancer .....	209
rationale for .....	209
Curcumin .....	259
anti-inflammatory actions of .....	264
biological effects of .....	259
in chemoprevention .....	261
induction of apoptosis by .....	260
metabolism of .....	266
redox properties of .....	262
role in cancer chemoprevention/therapy .....	259
synthetic analogs/derivatives of .....	265
Cyclooxygenase .....	209,221
function/regulation .....	209,225
in breast cancer .....	225
in lung cancer .....	210
inhibitors for .....	210,226
interrelationships of .....	221
structure of .....	209
Cyclooxygenase-2 .....	187,212
as regulator of angiogenesis .....	213
as regulator of antigen presenting cell function .....	212
as regulator of cytokine balance .....	212
as regulator of T cell function .....	212
cGMP pathways of .....	193
cytoplasmic signaling pathways of .....	192
effect of EGF-R inhibitors .....	197
effect of NSAIDs .....	194
effect of P13K/akt inhibitors .....	198
expression of .....	187
in apoptosis .....	215
in tumor cell growth/proliferation .....	214
in tumor invasion .....	213
induced tumorigenesis .....	187
mechanisms of .....	187
negative effectors of .....	192
post-transcriptional regulation of .....	192
rho signaling pathway of .....	193
signaling pathways of .....	191
therapeutic strategies targeting .....	187
transcriptional regulation of .....	191
wingless-type MMTV (Wnt) pathways of .....	193
Cyclopenta[b]benzofurans .....	319
from Aglaia species .....	319
in cancer chemotherapy .....	319
in vivo evaluation of .....	332
mode of action of .....	333
synthesis of .....	334
CYP24 inhibitors .....	65
Cytostatic effects .....	455
of angiotensin inhibition tumor models .....	455
Cytotoxic molecules .....	367
from natural sources .....	367
Deltanoid design .....	57
for cancer chemoprevention/chemotherapy .....	57
Dendrimers .....	169
linked to monoclonal antibodies .....	169
Dextrans .....	178
boron delivery by .....	178
Didemnins .....	37
DNA damage .....	377
DNA damaging agents .....	595
as inducers of mitotic catastrophe .....	595
Dolastatins .....	35
Drug delivery system (DDS) .....	251
for optimized cancer chemotherapy .....	255
Drug delivery/transport .....	507
role of vascular hyperpermeability in .....	507
Flavaglines .....	319
chemistry of .....	319
effect on cancer cell lines .....	325
3-(4'-Geranyloxy-3'-methoxyphenyl)-2-trans propenoic acid .....	571
cancer chemopreventive agent .....	571
pharmacological properties of .....	572
synthesis of .....	571
Gold coordination complexes .....	19
as anticancer agent .....	19
Gold drugs .....	20
in medicine .....	20
Green/black tea polyphenols .....	389
effect on androgens .....	389
effect on angiogenesis .....	399
effect on apoptosis .....	391
effect on arachidonic acid products .....	396
effect on aryl hydrocarbon receptor (AHR) .....	400
effect on cell cycle arrest .....	391
effect on cellular proliferation enzymes .....	396
effect on dihydrofolate reductase (DHFR) .....	399
effect on gene expression .....	398
effect on growth factor receptors .....	391
effect on metastasis .....	398
effect on nitric oxide (NO) .....	395
effect on nuclear factor-kB (NF-kB) .....	395
effect on oncogene expression .....	397
effect on oxidation/reduction .....	393
effect on STATS .....	396
effect on telomeres .....	393
effect on TNF-a .....	396
mechanisms of cancer prevention by .....	389

Hedgehog signaling pathway .....	445	anti-tumor activities of .....	436
alternative targets for .....	446	biological activities of .....	433
antagonists of .....	448	chemistry of .....	430
small molecules antagonists of .....	447	croton Lechleri against .....	433
targeting with small molecules .....	445	from Peru .....	429
Hemiasterlin .....	34	Metastasis .....	461
Hsp90 inhibitors .....	1	target inflammation genes against .....	461
resistance to .....	1	Nanopharmaceuticals .....	503
HTI-286 .....	34	delivery of .....	503
Hypoxia .....	281	in cancer cells .....	507
AQ4N in .....	283	1,4-Naphthoquinones .....	489
bioreductive prodrugs in .....	284	anti-cancer activities of .....	489
drugs target in .....	282	QSAR study of .....	489
EO9 in .....	283	Natural products .....	2,368
NLCQ-1 in .....	284	Necrosis .....	598
RH1 in .....	284	Nimesulide .....	233
Immunoliposomes .....	176	in cancer chemoprevention .....	233
Inflammation .....	461	use of .....	233
cascade of .....	461	Nonionic WSS polymeric carriers .....	252
heparanase/protease inhibitors against .....	464	in blood residency of drugs .....	252
role of .....	461	NSAIDS .....	68
signaling pathways associated with .....	463	Nucleic acid .....	563
Integrin avb3 .....	407	based therapeutics for tumor therapy .....	563
antibodies against .....	409	PEI for delivery of .....	564
gene silencing by small interfering RNA .....	412	polymeric carriers for .....	567
multimodality imaging of expression of .....	421	purification of PEI type .....	565
targeted delivery of therapeutic agents .....	416	targeting strategies of .....	565
Kagalalide F .....	33	Nucleic acid-based CHK 1 inhibitors .....	385
Lipidic nano-particles .....	513	Peptide .....	470
in cancer .....	513	as biodegradable substrates .....	484
pharmacodynamics of .....	513	role in passive targeting .....	470
pharmacokinetics of .....	513	Peptide phage display .....	9
sustained release vs. rapid released lipidic .....	514	anti-cancer peptides derived from .....	14
formulations of .....	514	cell surface biomarkers identified with .....	13
Liposomal drugs .....	540	for cell surface profiling of individual tumors .....	11
intracellular penetration of .....	540	role in anti-cancer strategies .....	9
toxicity of .....	540	selection on intact cells .....	10
tumor targeting by .....	544	PGE .....	189
Liposomes .....	173	in angiogenesis .....	189
boron delivery by non-targeted .....	173	in migration/invasion .....	189
boron delivery by targeted .....	176	negative effects of .....	190
Lung cancer .....	209	role in apoptosis .....	190
clinical studies of COX-2 inhibition in .....	215	role in immunosuppression .....	190
COX-2/regulation of host immunity in .....	212	Photodynamic therapy .....	469
Macromolecules .....	179	use of synthetic peptides for .....	469
used for delivering boron compounds .....	179	Photosensitizer-peptide conjugates .....	474
Marine peptides .....	33	for active tumor targeting .....	474
in clinical trial .....	33	PH-sensitive micelles .....	529
Medicinal plants .....	429	Phthalocyanines .....	160
against cancer .....	429		

Polyhedral boron compounds .....	75	Synthadotin ILX-651 .....	37
as diagnostic/therapeutic antitumor agents .....	75	Synthetic peptides .....	477
used for BNCT .....	76	as nuclear localization signals .....	477
Polyhedral boron hydrides .....	87	Temperature-sensitive micelles .....	526
as carriers of radiohalogen label .....	90	Tetraazaporphyrins .....	159
as chelators for radiometals .....	97	synthesis of .....	159
in radionuclide diagnostics/therapy .....	87	Tirapazamine .....	282
in targeted radionuclide therapy/diagnostics .....	90	Tissue-targeting polymeric carriers .....	253
Polymeric constructs .....	556	development of .....	253
as gene transfer systems .....	556	TNF- $\alpha$ 462 .....	
Polymeric hydrogels .....	555	antagonists of .....	465
drug release from .....	555	in tumor progression/metastasis .....	462
Polymeric nanoparticle .....	553	therapies for .....	464
applications in experimental/clinical oncology .....	553	Triazolopyrimidines .....	4
as in vitro diagnostics .....	553	Triptycene bisquinones .....	303
developments in .....	553	activities of .....	309
drug release from .....	555	antitumor activities of .....	303
engineering of .....	553	molecular targets of .....	303
in drug solubilization .....	554	synthesis of .....	303
long circulating type .....	558	Tumor .....	281,462,503
Polyplexes .....	564	capillary networks in .....	505
binding of .....	564	IFP in .....	506
intracellular fate of .....	564	interstitial matrix in .....	507
intracellular release of .....	564	macrophages in .....	462
Porphyrazines .....	164	malignant progression of .....	462
Prostaglandins .....	187	physiology of .....	503
biosynthesis of .....	187	transport of drugs in .....	505
in cancer .....	187	Tumor cells .....	475
Purines .....	4	for active tumor targeting .....	474
Pyrazolopyrimidines .....	4	Vascular endothelial growth factor (VEGF) .....	287
Pyropheophorptide .....	162	engineered soluble receptors of .....	294
boronated derivatives of .....	162	receptors for .....	288
Pyrrolopyrimidines .....	4	Venous thromboembolic events (VTE) .....	579
Quantitative structure-activity relationships (QSAR) .....	41	effects of anticoagulants in .....	582
Radicicols .....	2	heparins .....	583
Receptor ligands .....	170	in cancer surgery .....	580
boronated dendrimers delivered by .....	170	prophylaxis of .....	580
Shepherdin .....	6	treatment of .....	581
Silvestrol .....	340	Vitamin D .....	53,60
synthesis of dioxanyl ring moiety of .....	340	biosynthesis of .....	53
Soblidotin .....	36	metabolism of .....	53
Stimuli-sensitive micelles .....	533	receptor for .....	58
Stimuli-sensitive polymeric micelles .....	525	toxicity of .....	60
as anticancer drug carriers .....	525	Vitamin D binding protein .....	59
		pharmacokinetic of .....	59
		Water-soluble synthetic (WSS) .....	251