

TABLE OF CONTENTS

TOPIC	PAGE NO.
CHAPTER 1 INTRODUCTION	1
STUDY OBJECTIVES	1
REASONS FOR DOING THIS STUDY	1
INTENDED AUDIENCE	1
SCOPE OF THE STUDY	2
METHODOLOGY	2
INFORMATION SOURCES	2
ABOUT THE AUTHOR	2
RELATED BCC RESEARCH REPORTS	3
BCC ONLINE SERVICES	3
DISCLAIMER	3
CHAPTER 2 SUMMARY	5
SUMMARY TABLE GLOBAL REVENUE OF KINASE INHIBITORS MARKET, THROUGH 2016 (\$ MILLIONS)	6
SUMMARY FIGURE GLOBAL REVENUE OF KINASE INHIBITORS MARKET, 2009-2016 (\$ MILLIONS)	6
CHAPTER 3 OVERVIEW	8
DEFINITIONS	8
ENZYSME INHIBITORS	8
WHY ENZYME INHIBITION?	8
USE OF ENZYME INHIBITORS	9
Mechanism of Enzyme Inhibition	9
Types of Enzyme Inhibitors	9
CLASSIFICATION OF ENZYME INHIBITORS	10
TABLE 1 CLASSIFICATION OF ENZYME INHIBITORS	10
KINASE INHIBITORS	11
HISTORY OF PROTEIN KINASES	12
TABLE 2 HISTORY OF PROTEIN KINASES	12
TYPES OF KINASE INHIBITORS	13
TABLE 3 TYPES OF KINASE INHIBITORS	13
Small Molecule Inhibitors	13
TABLE 4 ATP COMPETITIVE AND NON-COMPETITIVE INHIBITORS	14
Antibody (Monoclonal) Inhibitors	14
CLASSIFICATION BY TYPES OF AMINO ACID PHOSPHORYLATION	14
SERINE/THREONINE KINASE INHIBITORS	14
TABLE 5 TYPES OF SERINE/THREONINE KINASE INHIBITORS	15
TYROSINE KINASE INHIBITORS	15
Receptor Tyrosine Kinase (RTK) Inhibitors	16
TABLE 6 TYPES OF RECEPTOR TYROSINE KINASE INHIBITORS	16
Non-Receptor Tyrosine Kinase (NRTK) Inhibitors	16
TABLE 7 TYPES OF NON-RECEPTOR TYROSINE KINASE INHIBITORS	16
CLASSIFICATION BY SITE OF ACTION	17
TABLE 8 CLASSIFICATION OF KINASE INHIBITORS BY SITE OF ACTION	17

TOPIC	PAGE NO.
CHAPTER 4 REGULATORY ASPECTS	20
TABLE 9 FDA-APPROVED KINASE INHIBITORS, 2008 TO FEBRUARY 2012	20
TABLE 10 EMA-APPROVED KINASE INHIBITORS 2008 TO FEBRUARY 2012	21
TABLE 11 SAFETY ALERTS AND WARNINGS FOR KINASE INHIBITORS 2008 TO FEBRUARY 2012	22
TABLE 12 NEW DRUG APPLICATIONS OF KINASE INHIBITORS	23
MARKET LEADERS AND THEIR PRODUCTS FOR KINASE INHIBITORS	24
TABLE 13 LEADING MANUFACTURERS AND SUPPLIERS OF RECEPTOR TYROSINE KINASE INHIBITORS	24
TABLE 14 LEADING MANUFACTURERS AND SUPPLIERS OF NON-RECEPTOR TYROSINE KINASE INHIBITORS	24
TABLE 15 LEADING MANUFACTURERS AND SUPPLIERS OF MULTI-TARGET TYROSINE KINASE INHIBITORS	24
TABLE 16 LEADING MANUFACTURERS AND SUPPLIERS OF SERINE AND THREONINE KINASE INHIBITORS	25
TABLE 17 LEADING MANUFACTURERS AND SUPPLIERS OF ANTIBODY KINASE INHIBITORS	25
CHAPTER 5 NEW DEVELOPMENTS	27
(RECEPTOR) TYROSINE KINASE INHIBITORS (TKIS)	27
TABLE 18 CLINICAL TRIALS IN EPIDERMAL GROWTH FACTOR RECEPTOR (EGFR) TKIS	27
TABLE 19 CLINICAL TRIALS IN HUMAN EPIDERMAL GROWTH FACTOR RECEPTOR 2 (HER2) TKIS	28
TABLE 20 CLINICAL TRIALS IN PLATELET-DERIVED GROWTH FACTOR RECEPTOR (PDGFR) TKIS	28
TABLE 21 CLINICAL TRIALS IN VASCULAR ENDOTHELIAL GROWTH FACTOR RECEPTOR (VEGFR) TKIS	28
(NON-RECEPTOR) TYROSINE KINASE INHIBITORS (TKIS)	29
TABLE 22 CLINICAL TRIALS IN BCR-ABL TYROSINE KINASE INHIBITORS	29
TABLE 23 CLINICAL TRIALS IN JANUS KINASE (JAK) INHIBITORS	29
TABLE 24 CLINICAL TRIALS IN SPLEEN TYROSINE KINASE (SYK) INHIBITORS	29
MULTIKINASE INHIBITORS	30
TABLE 25 CLINICAL TRIALS IN MULTIKINASE INHIBITORS	30
SERINE/THREONINE KINASE INHIBITOR	31
TABLE 26 CLINICAL TRIALS IN B-RAF KINASE INHIBITORS	31
TABLE 27 CLINICAL TRIALS IN MAP/MEK INHIBITORS	31
TABLE 28 CLINICAL TRIALS IN PI3K INHIBITORS	31
OTHER KINASE INHIBITOR PRODUCTS UNDER DEVELOPMENT	31
CHAPTER 6 GLOBAL MARKETS	34
MARKET ANALYSIS	34
TABLE 29 GLOBAL MARKET FOR KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	35
FIGURE 1 GLOBAL MARKET FOR KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	35
TYROSINE KINASE INHIBITORS	36
TABLE 30 GLOBAL MARKET FOR TYROSINE KINASE INHIBITORS THROUGH 2016 (\$ MILLIONS)	36
FIGURE 2 GLOBAL MARKET FOR TYROSINE KINASE INHIBITORS 2009-2016 (\$ MILLIONS)	36
Receptor Tyrosine Kinase Inhibitors	37
EGFR	38
PDGFR	38

TOPIC	PAGE NO.
VEGFR	38
HER2	39
Market Overview	39
Market Revenue	40
<i>TABLE 31 GLOBAL MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR THROUGH 2016 (\$ MILLIONS)</i>	40
<i>FIGURE 3 GLOBAL MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)</i>	40
Non-Receptor Tyrosine Kinase Inhibitors	41
BCR-ABL	41
Janus Kinase (JAK) Inhibitor	42
Mesenchymal Epithelial Transition Growth Factor (c-MET)	42
Spleen Tyrosine Kinase (SYK) Inhibitors	42
Market Overview	43
Market Revenue	43
<i>TABLE 32 GLOBAL MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITOR THROUGH 2016 (\$ MILLIONS)</i>	43
<i>FIGURE 4 GLOBAL MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)</i>	43
Multikinase Inhibitors	44
Market Overview	44
Market Revenue	45
<i>TABLE 33 GLOBAL MARKET FOR MULTIKINASE TYROSINE INHIBITOR THROUGH 2016 (\$ MILLIONS)</i>	45
<i>FIGURE 5 GLOBAL MARKET FOR MULTIKINASE TYROSINE INHIBITOR, 2009-2016 (\$ MILLIONS)</i>	45
SERINE/THREONINE KINASE INHIBITORS	46
mTOR Kinase Inhibitors	46
B RAF	46
RHO Kinase Inhibitors	47
Cyclin Dependant Kinase Inhibitor	47
Aurora Kinase Inhibitors	47
MAP/MEK Kinase Inhibitors	47
JNK Inhibitors	48
Protein Kinase C Inhibitors	48
PI3K Inhibitors	48
Market Overview	49
Market Revenue	49
<i>TABLE 34 GLOBAL MARKET FOR SERINE/THREONINE KINASE INHIBITOR THROUGH 2016 (\$ MILLIONS)</i>	49
<i>FIGURE 6 GLOBAL MARKET FOR SERINE/THREONINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	50
MONOCLONAL ANTIBODY KINASE INHIBITOR	50
Humanized Monoclonal Antibody	51
Chimeric Monoclonal Antibody	51
Human Monoclonal Antibody	52
Market Overview	52
Market Revenue	53

TOPIC	PAGE NO.
<i>TABLE 35 GLOBAL MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)</i>	53
<i>FIGURE 7 GLOBAL MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)</i>	53
MARKET SHARE	54
RECEPTOR TYROSINE KINASE INHIBITORS	54
<i>TABLE 36 RECEPTOR TYROSINE KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)</i>	54
<i>FIGURE 8 RECEPTOR TYROSINE KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)</i>	54
NON-RECEPTOR TYROSINE KINASE INHIBITORS	55
MULTI-TARGET KINASE INHIBITORS	55
<i>TABLE 37 MULTI-TARGET KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)</i>	55
<i>FIGURE 9 MULTI-TARGET KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)</i>	55
SERINE/THREONINE KINASE INHIBITORS	56
<i>TABLE 38 SERINE/THREONINE KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)</i>	56
<i>FIGURE 10 SERINE/THREONINE KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)</i>	56
MONOCLONAL ANTIBODY KINASE INHIBITORS	57
<i>TABLE 39 MONOCLONAL ANTIBODY KINASE INHIBITOR MARKET SHARES BY REGION, 2010 (%)</i>	57
<i>FIGURE 11 MONOCLONAL ANTIBODY KINASE INHIBITOR MARKET SHARES BY REGION, 2010 (%)</i>	57
MARKET BY APPLICATIONS	58
MARKET REVENUE	59
<i>TABLE 40 GLOBAL MARKET FOR KINASE INHIBITORS BY APPLICATIONS, THROUGH 2016 (\$ MILLIONS)</i>	60
<i>FIGURE 12 GLOBAL MARKET FOR KINASE INHIBITORS BY APPLICATIONS, 2009-2016 (\$ MILLIONS)</i>	60
ANTINEOPLASTIC AGENTS	60
<i>TABLE 41 GLOBAL MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, THROUGH 2016 (\$ MILLIONS)</i>	64
<i>FIGURE 13 GLOBAL MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, 2009-2016 (\$ MILLIONS)</i>	64
IMMUNOSUPPRESSANTS	64
<i>TABLE 42 GLOBAL MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, THROUGH 2016 (\$ MILLIONS)</i>	65
<i>FIGURE 14 GLOBAL MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, 2009-2016 (\$ MILLIONS)</i>	65
AGE-RELATED MACULAR DEGENERATION	66
<i>TABLE 43 GLOBAL MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, THROUGH 2016 (\$ MILLIONS)</i>	67
<i>FIGURE 15 GLOBAL MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, 2009-2016 (\$ MILLIONS)</i>	67
MARKET SHARE	68
<i>TABLE 44 GLOBAL MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS, 2010 (%)</i>	68
<i>FIGURE 16 GLOBAL MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS, 2010 (%)</i>	68
CHAPTER 7 MARKETS IN THE UNITED STATES	70
MARKET ANALYSIS	70
<i>TABLE 45 U.S. MARKET FOR KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	70
<i>FIGURE 17 U.S. MARKET FOR KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	70
TYROSINE KINASE INHIBITORS	71

TOPIC	PAGE NO.
<i>TABLE 46 U.S. MARKET FOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	71
<i>FIGURE 18 U.S. MARKET FOR TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	72
Receptor Tyrosine Kinase Inhibitors	72
EGFR	73
PDGFR	73
VEGFR	73
HER2	74
Market Overview	74
Market Revenue	75
<i>TABLE 47 U.S. MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)</i>	75
<i>FIGURE 19 U.S. MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)</i>	75
Non-Receptor Tyrosine Kinase Inhibitors	76
BCR-ABL	76
Janus Kinase (JAK) Inhibitor	77
Mesenchymal Epithelial Transition Growth Factor (c-MET)	77
Spleen Tyrosine Kinase (SYK) Inhibitors	77
Market Overview	78
Market Revenue	78
<i>TABLE 48 U.S. MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)</i>	78
<i>FIGURE 20 U.S. MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)</i>	78
Multikinase Inhibitors	79
Market Overview	79
Market Revenue	80
<i>TABLE 49 U.S. MARKET FOR MULTIKINASE TYROSINE INHIBITOR, THROUGH 2016 (\$ MILLIONS)</i>	81
<i>FIGURE 21 U.S. MARKET FOR MULTIKINASE TYROSINE INHIBITOR, 2009-2016 (\$ MILLIONS)</i>	81
SERINE/THREONINE KINASE INHIBITORS	81
M TOR Kinase Inhibitors	81
B RAF	82
RHO Kinase Inhibitors	82
Cyclin Dependant Kinase Inhibitor	82
Aurora Kinase Inhibitors	82
MAP/MEK Kinase Inhibitors	83
JNK Inhibitors	83
Protein Kinase C Inhibitors	83
PI3K Inhibitors	84
Market Overview	84
Market Revenue	85
<i>TABLE 50 U.S. MARKET FOR SERINE/THREONINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)</i>	85
<i>FIGURE 22 U.S. MARKET FOR SERINE/THREONINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)</i>	86
MONOCLONAL ANTIBODY KINASE INHIBITOR	86
Humanized Monoclonal Antibody	87
Chimeric Monoclonal Antibody	87

TOPIC	PAGE NO.
Human Monoclonal Antibody	88
Market Overview	88
Market Revenue	89
<i>TABLE 51 U.S. MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)</i>	89
<i>FIGURE 23 U.S. MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITOR 2009-2016 (\$ MILLIONS)</i>	89
MARKET SHARE OF INDUSTRY LEADERS IN U.S	90
RECEPTOR TYROSINE KINASE INHIBITORS	90
<i>TABLE 52 U.S. MARKET SHARES OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	90
<i>FIGURE 24 U.S. MARKET SHARES OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	90
NON-RECEPTOR TYROSINE KINASE INHIBITORS	90
MULTI-TARGET KINASE INHIBITORS	91
<i>TABLE 53 U.S. MARKET SHARES OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	91
<i>FIGURE 25 U.S. MARKET SHARES OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	91
SERINE/ THREONINE KINASE INHIBITORS	91
<i>TABLE 54 U.S. MARKET SHARES OF SERINE/ THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	91
<i>FIGURE 26 U.S. MARKET SHARES OF SERINE/ THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	92
ANTIBODY KINASE INHIBITORS	92
<i>TABLE 55 U.S. MARKET SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	93
<i>FIGURE 27 U.S. MARKET SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	93
MARKET APPLICATIONS	93
MARKET REVENUE	94
<i>TABLE 56 U.S. MARKET FOR KINASE INHIBITORS BY APPLICATION, THROUGH 2016 (\$ MILLIONS)</i>	94
<i>FIGURE 28 U.S. MARKET FOR KINASE INHIBITORS BY APPLICATION, 2009-2016 (\$ MILLIONS)</i>	95
ANTINEOPLASTIC AGENTS	95
<i>TABLE 57 U.S. MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, THROUGH 2016 (\$ MILLIONS)</i>	99
<i>FIGURE 29 U.S. MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, 2009-2016 (\$ MILLIONS)</i>	99
IMMUNOSUPPRESSANTS	100
<i>TABLE 58 U.S. MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, THROUGH 2016 (\$ MILLIONS)</i>	100
<i>FIGURE 30 U.S. MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, 2009-2016 (\$ MILLIONS)</i>	100
AGE-RELATED MACULAR DEGENERATION	101
<i>TABLE 59 U.S. MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, THROUGH 2016 (\$ MILLIONS)</i>	102
<i>FIGURE 31 U.S. MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, 2009-2016 (\$ MILLIONS)</i>	102
MARKET SHARE	103

TOPIC	PAGE NO.
<i>TABLE 60 MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS IN U.S., 2010 (%)</i>	103
<i>FIGURE 32 MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS IN U.S., 2010 (%)</i>	103
CHAPTER 8 MARKETS IN EUROPE	105
MARKET ANALYSIS	105
<i>TABLE 61 EUROPEAN MARKET FOR KINASE INHIBITORS THROUGH 2016 (\$ MILLIONS)</i>	105
<i>FIGURE 33 EUROPEAN MARKET FOR KINASE INHIBITORS, 2009- 2016 (\$ MILLIONS)</i>	105
TYROSINE KINASE INHIBITORS	106
<i>TABLE 62 EUROPEAN MARKET FOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	106
<i>FIGURE 34 EUROPEAN MARKET FOR TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	106
Receptor Tyrosine Kinase Inhibitors	107
EGFR	107
PDGFR	107
VEGFR	108
HER2	108
Market Overview	109
Market Revenue	109
<i>TABLE 63 EUROPEAN MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)</i>	109
<i>FIGURE 35 EUROPEAN MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)</i>	110
Non-Receptor Tyrosine Kinase Inhibitors	110
BCR-ABL	111
Janus Kinase (JAK) Inhibitor	111
Mesenchymal Epithelial Transition Growth Factor (c-MET)	111
Spleen Tyrosine Kinase (SYK) Inhibitors	112
Market Overview	112
Market Revenue	113
<i>TABLE 64 EUROPEAN MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)</i>	113
Multikinase Inhibitors	113
Market Overview	113
Market Revenue	114
<i>TABLE 65 EUROPEAN MARKET FOR MULTIKINASE TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	114
<i>FIGURE 36 EUROPEAN MARKET FOR MULTIKINASE TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	115
SERINE/THREONINE KINASE INHIBITORS	115
M TOR Kinase Inhibitors	115
B-RAF Kinase Inhibitors	115
RHO Kinase Inhibitors	116
Cyclin-Dependant Kinase Inhibitor	116
Aurora Kinase Inhibitors	116
MAP/MEK Kinase Inhibitors	117
JNK Inhibitors	117
Protein Kinase C Inhibitors	117
PI3K Inhibitors	118

TOPIC	PAGE NO.
Market Overview	118
Market Revenue	119
<i>TABLE 66 EUROPEAN MARKET FOR SERINE/THREONINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	119
<i>FIGURE 37 EUROPE MARKET FOR SERINE/THREONINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	119
MONOCLONAL ANTIBODIES	120
Humanized Monoclonal Antibody	121
Chimeric Monoclonal Antibody	121
Human Monoclonal Antibody	121
Market Overview	121
Market Revenue	123
<i>TABLE 67 EUROPEAN MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	123
<i>FIGURE 38 EUROPEAN MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	123
MARKET SHARES OF INDUSTRY LEADERS IN EUROPE	124
RECEPTOR TYROSINE KINASE INHIBITORS	124
<i>TABLE 68 EUROPEAN MARKET SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	125
<i>FIGURE 39 EUROPEAN MARKET SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	125
NON-RECEPTOR TYROSINE KINASE INHIBITORS	125
MULTI-TARGET KINASE INHIBITORS	125
<i>TABLE 69 EUROPEAN MARKET SHARE OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	126
<i>FIGURE 40 EUROPEAN MARKET SHARE OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	126
SERINE/ THREONINE KINASE INHIBITORS	126
<i>TABLE 70 EUROPEAN MARKET SHARE OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	127
<i>FIGURE 41 EUROPEAN MARKET SHARE OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	127
ANTIBODY KINASE INHIBITORS	127
<i>TABLE 71 EUROPEAN MARKET SHARES OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	127
<i>FIGURE 42 EUROPEAN MARKET SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	127
MARKET APPLICATIONS	128
MARKET REVENUE	129
<i>TABLE 72 EUROPEAN MARKET FOR KINASE INHIBITORS BY APPLICATIONS, THROUGH 2016 (\$ MILLIONS)</i>	130
<i>FIGURE 43 EUROPEAN MARKET FOR KINASE INHIBITORS BY APPLICATIONS, 2009-2016 (\$ MILLIONS)</i>	130
ANTINEOPLASTIC AGENTS	130
<i>TABLE 73 EUROPEAN MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, THROUGH 2016 (\$ MILLIONS)</i>	134
<i>FIGURE 44 EUROPEAN MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, 2009-2016 (\$ MILLIONS)</i>	134
IMMUNOSUPPRESSANTS	135

TOPIC	PAGE NO.
<i>TABLE 74 EUROPEAN MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, THROUGH 2016 (\$ MILLIONS)</i>	136
<i>FIGURE 45 EUROPEAN MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, 2009-2016 (\$ MILLIONS)</i>	136
AGE-RELATED MACULAR DEGENERATION	136
<i>TABLE 75 EUROPEAN MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, THROUGH 2016 (\$ MILLIONS)</i>	137
<i>FIGURE 46 EUROPEAN MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, 2009-2016 (\$ MILLIONS)</i>	137
Market Share	138
<i>TABLE 76 MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS, IN EUROPE, 2010 (%)</i>	138
<i>FIGURE 47 MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS, IN EUROPE, 2010 (%)</i>	138
CHAPTER 9 MARKETS IN ASIA	140
MARKET ANALYSIS	140
<i>TABLE 77 ASIAN MARKET FOR KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	141
<i>FIGURE 48 ASIAN MARKET FOR KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	141
TYROSINE KINASE INHIBITORS	142
<i>TABLE 78 ASIAN MARKET FOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	142
<i>FIGURE 49 ASIAN MARKET FOR TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	142
Receptor Tyrosine Kinase Inhibitors	143
EGFR	143
PDGFR	143
VEGFR	144
HER2	144
Market Overview	144
Market Revenue	145
<i>TABLE 79 ASIAN MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)</i>	145
<i>FIGURE 50 ASIAN MARKET FOR RECEPTOR TYROSINE KINASE INHIBITORS 2009-2016 (\$ MILLIONS)</i>	145
Non-Receptor Tyrosine Kinase Inhibitors	146
BCR-ABL	146
Janus Kinase (JAK) Inhibitor	147
Mesenchymal Epithelial Transition Growth Factor (c-MET)	147
Spleen Tyrosine Kinase (SYK) Inhibitors	147
Market Overview	148
Market Revenue	148
<i>TABLE 80 ASIAN MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	148
Multikinase Inhibitors	148
Market Overview	148
Market Revenue	149
<i>TABLE 81 ASIAN MARKET FOR MULTIKINASE TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	149
<i>FIGURE 51 ASIAN MARKET FOR MULTIKINASE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	149
SERINE/THREONINE KINASE INHIBITORS	150

TOPIC	PAGE NO.
M TOR Kinase Inhibitors	150
B RAF Kinase Inhibitors	151
RHO Kinase Inhibitors	151
Cyclin-Dependant Kinase Inhibitor	151
Aurora Kinase Inhibitors	151
MAP/MEK Kinase Inhibitors	152
JNK Inhibitors	152
Protein Kinase C Inhibitors	152
PI3K Inhibitors	153
Market Overview	153
Market Revenue	153
<i>TABLE 82 ASIAN MARKET FOR SERINE/THREONINE KINASE INHIBITORS THROUGH 2016 (\$ MILLIONS)</i>	153
<i>FIGURE 52 ASIAN MARKET FOR SERINE/THREONINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	154
MONOCLONAL ANTIBODIES	154
Humanized Monoclonal Antibody	155
Chimeric Monoclonal Antibody	155
Human Monoclonal Antibody	155
Market Overview	156
Market Revenue	157
<i>TABLE 83 ASIAN MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	157
<i>FIGURE 53 ASIAN MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	157
MARKET SHARE OF INDUSTRY LEADERS IN ASIA	158
RECEPTOR TYROSINE KINASE INHIBITORS	158
<i>TABLE 84 ASIAN MARKET SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	158
<i>FIGURE 54 ASIAN MARKET SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	158
NON-RECEPTOR TYROSINE KINASE INHIBITORS	158
MULTI-TARGET KINASE INHIBITORS	159
<i>TABLE 85 ASIAN MARKET SHARE OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	159
<i>FIGURE 55 ASIAN MARKET SHARES OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	159
SERINE/THREONINE KINASE INHIBITORS	159
<i>TABLE 86 ASIAN MARKET SHARE OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	160
<i>FIGURE 56 ASIAN MARKET SHARES OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	160
ANTIBODY KINASE INHIBITORS	160
<i>TABLE 87 ASIAN MARKET SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	161
<i>FIGURE 57 ASIAN MARKET SHARES OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)</i>	161
MARKET APPLICATIONS	161
MARKET REVENUE	163

TOPIC	PAGE NO.
<i>TABLE 88 ASIAN MARKET FOR KINASE INHIBITORS BY APPLICATIONS THROUGH 2016 (\$ MILLIONS)</i>	163
<i>FIGURE 58 ASIAN MARKET FOR KINASE INHIBITORS BY APPLICATIONS 2009-2016 (\$ MILLIONS)</i>	163
ANTINEOPLASTIC AGENTS	163
<i>TABLE 89 ASIAN MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, THROUGH 2016 (\$ MILLIONS)</i>	166
<i>FIGURE 59 ASIAN MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, 2009-2016 (\$ MILLIONS)</i>	167
IMMUNOSUPPRESSANTS	167
<i>TABLE 90 ASIAN MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, THROUGH 2016 (\$ MILLIONS)</i>	168
<i>FIGURE 60 ASIAN MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, 2009-2016 (\$ MILLIONS)</i>	168
AGE-RELATED MACULAR DEGENERATION	169
<i>TABLE 91 ASIAN MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, THROUGH 2016 (\$ MILLIONS)</i>	170
<i>FIGURE 61 ASIAN MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, 2009-2016 (\$ MILLIONS)</i>	170
Market Share	171
<i>TABLE 92 MARKET SHARE OF KINASE INHIBITORS IN ASIA, BY APPLICATION, 2010 (%)</i>	171
<i>FIGURE 62 MARKET SHARE OF KINASE INHIBITORS IN ASIA, BY APPLICATION, 2010 (%)</i>	171
CHAPTER 10 EMERGING MARKETS	173
MARKET ANALYSIS	173
<i>TABLE 93 EMERGING MARKETS FOR KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	173
<i>FIGURE 63 EMERGING MARKETS FOR KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	174
TYROSINE KINASE INHIBITORS	174
<i>TABLE 94 EMERGING MARKETS FOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	174
<i>FIGURE 64 EMERGING MARKETS FOR TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	175
Receptor Tyrosine Kinase Inhibitors	175
EGFR	176
PDGFR	176
VEGFR	176
HER2 (Human Epidermal Growth Factor Receptor 2)	177
Market Overview	177
Market Revenue	177
<i>TABLE 95 EMERGING MARKETS FOR RECEPTOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	178
<i>FIGURE 65 EMERGING MARKETS FOR RECEPTOR TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	178
Non-Receptor Tyrosine Kinase Inhibitors	179
BCR-ABL	179
Janus Kinase (JAK) Inhibitor	179
Mesenchymal Epithelial Transition Growth Factor (c-MET)	179
Spleen Tyrosine Kinase (SYK) Inhibitors	180
Market Overview	180
Market Revenue	181

TOPIC	PAGE NO.
<i>TABLE 96 EMERGING MARKETS FOR NON-RECEPTOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	181
Multikinase Inhibitors	181
Market Overview	181
Market Revenue	181
<i>TABLE 97 EMERGING MARKETS FOR MULTIKINASE TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	182
<i>FIGURE 66 EMERGING MARKETS FOR MULTIKINASE TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	182
SERINE/THREONINE KINASE INHIBITORS	182
mTOR Kinase Inhibitors	182
B RAF Kinase Inhibitors	183
RHO Kinase Inhibitors	183
Cyclin-Dependant Kinase Inhibitor	183
Aurora Kinase Inhibitors	183
MAP/MEK Kinase Inhibitors	184
JNK Inhibitors	184
Protein Kinase C Inhibitors	184
PI3K Inhibitors	185
Market Overview	185
Market Revenue	186
<i>TABLE 98 EMERGING MARKETS FOR SERINE/THREONINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	186
<i>FIGURE 67 EMERGING MARKETS FOR SERINE/THREONINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)</i>	186
MONOCLONAL ANTIBODIES	187
Humanized Monoclonal Antibody	188
Chimeric Monoclonal Antibody	188
Human Monoclonal Antibody	188
Market Overview	189
Market Revenue	189
<i>TABLE 99 EMERGING MARKETS FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)</i>	190
<i>FIGURE 68 EMERGING MARKETS FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)</i>	190
MARKET SHARE OF INDUSTRY LEADERS IN EMERGING MARKETS	190
RECEPTOR TYROSINE KINASE INHIBITORS	190
<i>TABLE 100 SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)</i>	191
<i>FIGURE 69 SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)</i>	191
NON-RECEPTOR TYROSINE KINASE INHIBITORS	191
MULTI-TARGET KINASE INHIBITORS	191
<i>TABLE 101 SHARE OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)</i>	192
<i>FIGURE 70 SHARES OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)</i>	192
SERINE/THREONINE KINASE INHIBITORS	192
<i>TABLE 102 SHARES OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)</i>	192

TOPIC	PAGE NO.
<i>FIGURE 71 SHARES OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)</i>	192
ANTIBODY KINASE INHIBITORS	193
<i>TABLE 103 SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS 2010 (%)</i>	193
<i>FIGURE 72 SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)</i>	193
MARKET APPLICATIONS	194
MARKET REVENUE	195
<i>TABLE 104 EMERGING MARKETS FOR KINASE INHIBITORS BY APPLICATION, THROUGH 2016 (\$ MILLIONS)</i>	195
<i>FIGURE 73 EMERGING MARKETS FOR KINASE INHIBITORS BY APPLICATION, 2009-2016 (\$ MILLIONS)</i>	195
ANTINEOPLASTIC AGENTS	196
<i>TABLE 105 EMERGING MARKETS FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, THROUGH 2016 (\$ MILLIONS)</i>	198
<i>FIGURE 74 EMERGING MARKETS FOR KINASE INHIBITORS BY APPLICATION, 2009-2016 (\$ MILLIONS)</i>	198
IMMUNOSUPPRESSANTS	199
<i>TABLE 106 EMERGING MARKETS FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, THROUGH 2016 (\$ MILLIONS)</i>	200
<i>FIGURE 75 EMERGING MARKETS FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, 2009-2016 (\$ MILLIONS)</i>	200
AGE-RELATED MACULAR DEGENERATION	201
<i>TABLE 107 EMERGING MARKETS FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, THROUGH 2016 (\$ MILLIONS)</i>	202
<i>FIGURE 76 EMERGING MARKETS FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, 2009-2016 (\$ MILLIONS)</i>	202
MARKET SHARE	202
<i>TABLE 108 SHARE OF KINASE INHIBITORS IN EMERGING MARKETS BY APPLICATION, 2010 (%)</i>	203
<i>FIGURE 77 SHARE OF KINASE INHIBITORS IN EMERGING MARKETS BY APPLICATION, 2010 (%)</i>	203
CHAPTER 11 PATENT ANALYSIS	205
PATENTS BY YEAR	205
<i>TABLE 109 NUMBER OF SIGNIFICANT PATENTS BY YEAR, 2008 TO END OF FEBRUARY 2012</i>	205
<i>FIGURE 78 NUMBER OF PATENTS BY YEAR, 2008 TO END OF FEBRUARY 2012</i>	205
<i>FIGURE 79 NUMBER OF PATENTS BY YEAR, 2008 TO END OF FEBRUARY 2012 (%)</i>	206
PATENTS BY CATEGORY	206
<i>TABLE 110 PATENTS BY CATEGORY FOR KINASE INHIBITORS 2008 TO END OF FEBRUARY 2012</i>	207
<i>FIGURE 80 PATENTS BY CATEGORY FOR KINASE INHIBITORS 2008 TO END OF FEBRUARY 2012</i>	207
PATENTS BY TYPE	207
<i>TABLE 111 PATENTS BY TYPE FOR TYROSINE KINASE INHIBITORS 2008 TO END OF FEBRUARY 2012</i>	207
<i>FIGURE 81 PATENTS BY TYPE FOR TYROSINE KINASE INHIBITORS 2008 TO END OF FEBRUARY 2012</i>	208
<i>TABLE 112 PATENTS BY TYPE FOR SERINE/THREONINE KINASE INHIBITORS, 2008 TO END OF FEBRUARY 2012</i>	208

TOPIC	PAGE NO.
<i>FIGURE 82 PATENTS BY TYPE FOR SERINE/THREONINE KINASE INHIBITORS, 2008 TO END OF FEBRUARY 2012</i>	208
PATENTS BY COMPANY	209
<i>TABLE 113 NUMBER OF U.S. PATENTS BY COMPANY FOR INDUSTRIAL ENZYMES, 2008 TO END OF FEBRUARY 2012</i>	209
PATENTS BY COUNTRY	210
<i>TABLE 114 NUMBER OF U.S. PATENTS BY COUNTRY FOR KINASE INHIBITORS, 2008 TO END OF FEBRUARY 2012</i>	210
<i>FIGURE 83 NUMBER OF U.S. PATENTS BY COUNTRY FOR KINASE INHIBITORS, 2008 TO END OF FEBRUARY 2012</i>	210
<i>TABLE 115 PATENT SHARE BY COUNTRY FOR KINASE INHIBITORS, 2010-2012 (%)</i>	211
<i>FIGURE 84 PATENT SHARES BY COUNTRY FOR KINASE INHIBITORS, 2010-2012 (%)</i>	211
PATENTS BY ASSIGNEE	212
<i>TABLE 116 PATENTS BY ASSIGNEE FOR KINASE INHIBITORS, 2008 THROUGH END OF FEBRUARY 2012</i>	212
<i>FIGURE 85 PATENTS BY ASSIGNEE FOR KINASE INHIBITORS, 2008 THROUGH END OF FEBRUARY 2012</i>	212
CHAPTER 12 CURRENT STATUS	215
CANCER AND KINASE INHIBITORS	215
MULTIPLE SINGLE KINASE INHIBITORS VERSUS SINGLE MULTIKINASE INHIBITORS	216
EFFICACY	216
RESISTANCE	216
PHARMACOKINETICS	217
Selectivity	217
TUMOR MICROENVIRONMENT	217
TOXICITY	218
FUTURE DIRECTIONS	218
CHAPTER 13 COMPANY PROFILES	220
ABBOTT LABORATORIES	220
AMGEN INC.	220
ARQULE, INC.	221
ARRAY BIOPHARMA	221
ASTRAZENECA	222
AVEO PHARMACEUTICALS, INC.	222
BAYER AG	222
BRISTOL-MYERS SQUIBB	223
BOEHRINGER INGELHEIM	223
CYTRX CORPORATION	223
EISAI INC	224
ETON BIOSCIENCE, INC.	224
EXELIXIS, INC.	225
GLAXOSMITHKLINE	225
MERCK SERONO SA	226
NOVARTIS INTERNATIONAL AG	226
OSI PHARMACEUTICALS LLC	227
PFIZER	227
ROCHE GROUP	228

TOPIC	PAGE NO.
S*BIO PTE LTD	228
SANOFI-AVENTIS	228
TAKEDA PHARMACEUTICALS	229
CHAPTER 14 ABBREVIATIONS	231

LIST OF TABLES

TABLE HEADING	PAGE NO.
SUMMARY TABLE GLOBAL REVENUE OF KINASE INHIBITORS MARKET, THROUGH 2016 (\$ MILLIONS)	6
TABLE 1 CLASSIFICATION OF ENZYME INHIBITORS	10
TABLE 2 HISTORY OF PROTEIN KINASES	12
TABLE 3 TYPES OF KINASE INHIBITORS	13
TABLE 4 ATP COMPETITIVE AND NON-COMPETITIVE INHIBITORS	14
TABLE 5 TYPES OF SERINE/THREONINE KINASE INHIBITORS	15
TABLE 6 TYPES OF RECEPTOR TYROSINE KINASE INHIBITORS	16
TABLE 7 TYPES OF NON-RECEPTOR TYROSINE KINASE INHIBITORS	16
TABLE 8 CLASSIFICATION OF KINASE INHIBITORS BY SITE OF ACTION	17
TABLE 9 FDA-APPROVED KINASE INHIBITORS, 2008 TO FEBRUARY 2012	20
TABLE 10 EMA-APPROVED KINASE INHIBITORS 2008 TO FEBRUARY 2012	21
TABLE 11 SAFETY ALERTS AND WARNINGS FOR KINASE INHIBITORS 2008 TO FEBRUARY 2012	22
TABLE 12 NEW DRUG APPLICATIONS OF KINASE INHIBITORS	23
TABLE 13 LEADING MANUFACTURERS AND SUPPLIERS OF RECEPTOR TYROSINE KINASE INHIBITORS	24
TABLE 14 LEADING MANUFACTURERS AND SUPPLIERS OF NON-RECEPTOR TYROSINE KINASE INHIBITORS	24
TABLE 15 LEADING MANUFACTURERS AND SUPPLIERS OF MULTI-TARGET TYROSINE KINASE INHIBITORS	24
TABLE 16 LEADING MANUFACTURERS AND SUPPLIERS OF SERINE AND THREONINE KINASE INHIBITORS	25
TABLE 17 LEADING MANUFACTURERS AND SUPPLIERS OF ANTIBODY KINASE INHIBITORS	25
TABLE 18 CLINICAL TRIALS IN EPIDERMAL GROWTH FACTOR RECEPTOR (EGFR) TKIS	27
TABLE 19 CLINICAL TRIALS IN HUMAN EPIDERMAL GROWTH FACTOR RECEPTOR 2 (HER2) TKIS	28
TABLE 20 CLINICAL TRIALS IN PLATELET-DERIVED GROWTH FACTOR RECEPTOR (PDGFR) TKIS	28
TABLE 21 CLINICAL TRIALS IN VASCULAR ENDOTHELIAL GROWTH FACTOR RECEPTOR (VEGFR) TKIS	28
TABLE 22 CLINICAL TRIALS IN BCR-ABL TYROSINE KINASE INHIBITORS	29
TABLE 23 CLINICAL TRIALS IN JANUS KINASE (JAK) INHIBITORS	29
TABLE 24 CLINICAL TRIALS IN SPLEEN TYROSINE KINASE (SYK) INHIBITORS	29
TABLE 25 CLINICAL TRIALS IN MULTIKINASE INHIBITORS	30
TABLE 26 CLINICAL TRIALS IN B-RAF KINASE INHIBITORS	31
TABLE 27 CLINICAL TRIALS IN MAP/MEK INHIBITORS	31
TABLE 28 CLINICAL TRIALS IN PI3K INHIBITORS	31
TABLE 29 GLOBAL MARKET FOR KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	35
TABLE 30 GLOBAL MARKET FOR TYROSINE KINASE INHIBITORS THROUGH 2016 (\$ MILLIONS)	36
TABLE 31 GLOBAL MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR THROUGH 2016 (\$ MILLIONS)	40
TABLE 32 GLOBAL MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITOR THROUGH 2016 (\$ MILLIONS)	43
TABLE 33 GLOBAL MARKET FOR MULTIKINASE TYROSINE INHIBITOR THROUGH 2016 (\$ MILLIONS)	45
TABLE 34 GLOBAL MARKET FOR SERINE/THREONINE KINASE INHIBITOR THROUGH 2016 (\$ MILLIONS)	49

TABLE HEADING	PAGE NO.
TABLE 35 GLOBAL MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)	53
TABLE 36 RECEPTOR TYROSINE KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)	54
TABLE 37 MULTI-TARGET KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)	55
TABLE 38 SERINE/THREONINE KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)	56
TABLE 39 MONOCLONAL ANTIBODY KINASE INHIBITOR MARKET SHARES BY REGION, 2010 (%)	57
TABLE 40 GLOBAL MARKET FOR KINASE INHIBITORS BY APPLICATIONS, THROUGH 2016 (\$ MILLIONS)	60
TABLE 41 GLOBAL MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, THROUGH 2016 (\$ MILLIONS)	64
TABLE 42 GLOBAL MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, THROUGH 2016 (\$ MILLIONS)	65
TABLE 43 GLOBAL MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, THROUGH 2016 (\$ MILLIONS)	67
TABLE 44 GLOBAL MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS, 2010 (%)	68
TABLE 45 U.S. MARKET FOR KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	70
TABLE 46 U.S. MARKET FOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	71
TABLE 47 U.S. MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)	75
TABLE 48 U.S. MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)	78
TABLE 49 U.S. MARKET FOR MULTIKINASE TYROSINE INHIBITOR, THROUGH 2016 (\$ MILLIONS)	81
TABLE 50 U.S. MARKET FOR SERINE/THREONINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)	85
TABLE 51 U.S. MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)	89
TABLE 52 U.S. MARKET SHARES OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	90
TABLE 53 U.S. MARKET SHARES OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)	91
TABLE 54 U.S. MARKET SHARES OF SERINE/ THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	91
TABLE 55 U.S. MARKET SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)	93
TABLE 56 U.S. MARKET FOR KINASE INHIBITORS BY APPLICATION, THROUGH 2016 (\$ MILLIONS)	94
TABLE 57 U.S. MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, THROUGH 2016 (\$ MILLIONS)	99
TABLE 58 U.S. MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, THROUGH 2016 (\$ MILLIONS)	100
TABLE 59 U.S. MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, THROUGH 2016 (\$ MILLIONS)	102
TABLE 60 MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS IN U.S., 2010 (%)	103
TABLE 61 EUROPEAN MARKET FOR KINASE INHIBITORS THROUGH 2016 (\$ MILLIONS)	105
TABLE 62 EUROPEAN MARKET FOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	106
TABLE 63 EUROPEAN MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)	109
TABLE 64 EUROPEAN MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)	113

TABLE HEADING	PAGE NO.
TABLE 65 EUROPEAN MARKET FOR MULTIKINASE TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	114
TABLE 66 EUROPEAN MARKET FOR SERINE/THREONINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	119
TABLE 67 EUROPEAN MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	123
TABLE 68 EUROPEAN MARKET SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	125
TABLE 69 EUROPEAN MARKET SHARE OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)	126
TABLE 70 EUROPEAN MARKET SHARE OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	127
TABLE 71 EUROPEAN MARKET SHARES OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)	127
TABLE 72 EUROPEAN MARKET FOR KINASE INHIBITORS BY APPLICATIONS, THROUGH 2016 (\$ MILLIONS)	130
TABLE 73 EUROPEAN MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, THROUGH 2016 (\$ MILLIONS)	134
TABLE 74 EUROPEAN MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, THROUGH 2016 (\$ MILLIONS)	136
TABLE 75 EUROPEAN MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, THROUGH 2016 (\$ MILLIONS)	137
TABLE 76 MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS, IN EUROPE, 2010 (%)	138
TABLE 77 ASIAN MARKET FOR KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	141
TABLE 78 ASIAN MARKET FOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	142
TABLE 79 ASIAN MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, THROUGH 2016 (\$ MILLIONS)	145
TABLE 80 ASIAN MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	148
TABLE 81 ASIAN MARKET FOR MULTIKINASE TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	149
TABLE 82 ASIAN MARKET FOR SERINE/THREONINE KINASE INHIBITORS THROUGH 2016 (\$ MILLIONS)	153
TABLE 83 ASIAN MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	157
TABLE 84 ASIAN MARKET SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	158
TABLE 85 ASIAN MARKET SHARE OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)	159
TABLE 86 ASIAN MARKET SHARE OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	160
TABLE 87 ASIAN MARKET SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)	161
TABLE 88 ASIAN MARKET FOR KINASE INHIBITORS BY APPLICATIONS THROUGH 2016 (\$ MILLIONS)	163
TABLE 89 ASIAN MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, THROUGH 2016 (\$ MILLIONS)	166
TABLE 90 ASIAN MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, THROUGH 2016 (\$ MILLIONS)	168
TABLE 91 ASIAN MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, THROUGH 2016 (\$ MILLIONS)	170
TABLE 92 MARKET SHARE OF KINASE INHIBITORS IN ASIA, BY APPLICATION, 2010 (%)	171

TABLE HEADING	PAGE NO.
TABLE 93 EMERGING MARKETS FOR KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	173
TABLE 94 EMERGING MARKETS FOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	174
TABLE 95 EMERGING MARKETS FOR RECEPTOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	178
TABLE 96 EMERGING MARKETS FOR NON-RECEPTOR TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	181
TABLE 97 EMERGING MARKETS FOR MULTIKINASE TYROSINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	182
TABLE 98 EMERGING MARKETS FOR SERINE/THREONINE KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	186
TABLE 99 EMERGING MARKETS FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, THROUGH 2016 (\$ MILLIONS)	190
TABLE 100 SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)	191
TABLE 101 SHARE OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)	192
TABLE 102 SHARES OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)	192
TABLE 103 SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS 2010 (%)	193
TABLE 104 EMERGING MARKETS FOR KINASE INHIBITORS BY APPLICATION, THROUGH 2016 (\$ MILLIONS)	195
TABLE 105 EMERGING MARKETS FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, THROUGH 2016 (\$ MILLIONS)	198
TABLE 106 EMERGING MARKETS FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, THROUGH 2016 (\$ MILLIONS)	200
TABLE 107 EMERGING MARKETS FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, THROUGH 2016 (\$ MILLIONS)	202
TABLE 108 SHARE OF KINASE INHIBITORS IN EMERGING MARKETS BY APPLICATION, 2010 (%)	203
TABLE 109 NUMBER OF SIGNIFICANT PATENTS BY YEAR, 2008 TO END OF FEBRUARY 2012	205
TABLE 110 PATENTS BY CATEGORY FOR KINASE INHIBITORS 2008 TO END OF FEBRUARY 2012	207
TABLE 111 PATENTS BY TYPE FOR TYROSINE KINASE INHIBITORS 2008 TO END OF FEBRUARY 2012	207
TABLE 112 PATENTS BY TYPE FOR SERINE/THREONINE KINASE INHIBITORS, 2008 TO END OF FEBRUARY 2012	208
TABLE 113 NUMBER OF U.S. PATENTS BY COMPANY FOR INDUSTRIAL ENZYMES, 2008 TO END OF FEBRUARY 2012	209
TABLE 114 NUMBER OF U.S. PATENTS BY COUNTRY FOR KINASE INHIBITORS, 2008 TO END OF FEBRUARY 2012	210
TABLE 115 PATENT SHARE BY COUNTRY FOR KINASE INHIBITORS, 2010-2012 (%)	211
TABLE 116 PATENTS BY ASSIGNEE FOR KINASE INHIBITORS, 2008 THROUGH END OF FEBRUARY 2012	212

LIST OF FIGURES

FIGURE TITLE	PAGE NO.
SUMMARY FIGURE GLOBAL REVENUE OF KINASE INHIBITORS MARKET, 2009-2016 (\$ MILLIONS)	6
FIGURE 1 GLOBAL MARKET FOR KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	35
FIGURE 2 GLOBAL MARKET FOR TYROSINE KINASE INHIBITORS 2009-2016 (\$ MILLIONS)	36
FIGURE 3 GLOBAL MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)	40
FIGURE 4 GLOBAL MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)	43
FIGURE 5 GLOBAL MARKET FOR MULTIKINASE TYROSINE INHIBITOR, 2009-2016 (\$ MILLIONS)	45
FIGURE 6 GLOBAL MARKET FOR SERINE/THREONINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	50
FIGURE 7 GLOBAL MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)	53
FIGURE 8 RECEPTOR TYROSINE KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)	54
FIGURE 9 MULTI-TARGET KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)	55
FIGURE 10 SERINE/THREONINE KINASE INHIBITOR MARKET SHARE BY REGION, 2010 (%)	56
FIGURE 11 MONOCLONAL ANTIBODY KINASE INHIBITOR MARKET SHARES BY REGION, 2010 (%)	57
FIGURE 12 GLOBAL MARKET FOR KINASE INHIBITORS BY APPLICATIONS, 2009-2016 (\$ MILLIONS)	60
FIGURE 13 GLOBAL MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, 2009-2016 (\$ MILLIONS)	64
FIGURE 14 GLOBAL MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, 2009-2016 (\$ MILLIONS)	65
FIGURE 15 GLOBAL MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, 2009-2016 (\$ MILLIONS)	67
FIGURE 16 GLOBAL MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS, 2010 (%)	68
FIGURE 17 U.S. MARKET FOR KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	70
FIGURE 18 U.S. MARKET FOR TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	72
FIGURE 19 U.S. MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)	75
FIGURE 20 U.S. MARKET FOR NON-RECEPTOR TYROSINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)	78
FIGURE 21 U.S. MARKET FOR MULTIKINASE TYROSINE INHIBITOR, 2009-2016 (\$ MILLIONS)	81
FIGURE 22 U.S. MARKET FOR SERINE/THREONINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)	86
FIGURE 23 U.S. MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITOR 2009-2016 (\$ MILLIONS)	89
FIGURE 24 U.S. MARKET SHARES OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	90
FIGURE 25 U.S. MARKET SHARES OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)	91
FIGURE 26 U.S. MARKET SHARES OF SERINE/ THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	92
FIGURE 27 U.S. MARKET SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)	93
FIGURE 28 U.S. MARKET FOR KINASE INHIBITORS BY APPLICATION, 2009-2016 (\$ MILLIONS)	95
FIGURE 29 U.S. MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, 2009-2016 (\$ MILLIONS)	99

FIGURE TITLE	PAGE NO.
FIGURE 30 U.S. MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, 2009-2016 (\$ MILLIONS)	100
FIGURE 31 U.S. MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, 2009-2016 (\$ MILLIONS)	102
FIGURE 32 MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS IN U.S., 2010 (%)	103
FIGURE 33 EUROPEAN MARKET FOR KINASE INHIBITORS, 2009- 2016 (\$ MILLIONS)	105
FIGURE 34 EUROPEAN MARKET FOR TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	106
FIGURE 35 EUROPEAN MARKET FOR RECEPTOR TYROSINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)	110
FIGURE 36 EUROPEAN MARKET FOR MULTIKINASE TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	115
FIGURE 37 EUROPE MARKET FOR SERINE/THREONINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	119
FIGURE 38 EUROPEAN MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	123
FIGURE 39 EUROPEAN MARKET SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	125
FIGURE 40 EUROPEAN MARKET SHARE OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)	126
FIGURE 41 EUROPEAN MARKET SHARE OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	127
FIGURE 42 EUROPEAN MARKET SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)	127
FIGURE 43 EUROPEAN MARKET FOR KINASE INHIBITORS BY APPLICATIONS, 2009-2016 (\$ MILLIONS)	130
FIGURE 44 EUROPEAN MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, 2009-2016 (\$ MILLIONS)	134
FIGURE 45 EUROPEAN MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, 2009-2016 (\$ MILLIONS)	136
FIGURE 46 EUROPEAN MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, 2009-2016 (\$ MILLIONS)	137
FIGURE 47 MARKET SHARE OF APPLICATIONS OF KINASE INHIBITORS, IN EUROPE, 2010 (%)	138
FIGURE 48 ASIAN MARKET FOR KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	141
FIGURE 49 ASIAN MARKET FOR TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	142
FIGURE 50 ASIAN MARKET FOR RECEPTOR TYROSINE KINASE INHIBITORS 2009-2016 (\$ MILLIONS)	145
FIGURE 51 ASIAN MARKET FOR MULTIKINASE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	149
FIGURE 52 ASIAN MARKET FOR SERINE/THREONINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	154
FIGURE 53 ASIAN MARKET FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	157
FIGURE 54 ASIAN MARKET SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	158
FIGURE 55 ASIAN MARKET SHARES OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS, 2010 (%)	159
FIGURE 56 ASIAN MARKET SHARES OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS, 2010 (%)	160
FIGURE 57 ASIAN MARKET SHARES OF ANTIBODY KINASE INHIBITOR MANUFACTURERS, 2010 (%)	161
FIGURE 58 ASIAN MARKET FOR KINASE INHIBITORS BY APPLICATIONS 2009-2016 (\$ MILLIONS)	163

FIGURE TITLE	PAGE NO.
FIGURE 59 ASIAN MARKET FOR KINASE INHIBITORS USED AS ANTINEOPLASTIC AGENTS, 2009-2016 (\$ MILLIONS)	167
FIGURE 60 ASIAN MARKET FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, 2009-2016 (\$ MILLIONS)	168
FIGURE 61 ASIAN MARKET FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, 2009-2016 (\$ MILLIONS)	170
FIGURE 62 MARKET SHARE OF KINASE INHIBITORS IN ASIA, BY APPLICATION, 2010 (%)	171
FIGURE 63 EMERGING MARKETS FOR KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	174
FIGURE 64 EMERGING MARKETS FOR TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	175
FIGURE 65 EMERGING MARKETS FOR RECEPTOR TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	178
FIGURE 66 EMERGING MARKETS FOR MULTIKINASE TYROSINE KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	182
FIGURE 67 EMERGING MARKETS FOR SERINE/THREONINE KINASE INHIBITOR, 2009-2016 (\$ MILLIONS)	186
FIGURE 68 EMERGING MARKETS FOR MONOCLONAL ANTIBODY KINASE INHIBITORS, 2009-2016 (\$ MILLIONS)	190
FIGURE 69 SHARE OF RECEPTOR TYROSINE KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)	191
FIGURE 70 SHARES OF MULTI-TARGET KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)	192
FIGURE 71 SHARES OF SERINE/THREONINE KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)	192
FIGURE 72 SHARE OF ANTIBODY KINASE INHIBITOR MANUFACTURERS IN EMERGING MARKETS, 2010 (%)	193
FIGURE 73 EMERGING MARKETS FOR KINASE INHIBITORS BY APPLICATION, 2009-2016 (\$ MILLIONS)	195
FIGURE 74 EMERGING MARKETS FOR KINASE INHIBITORS BY APPLICATION, 2009-2016 (\$ MILLIONS)	198
FIGURE 75 EMERGING MARKETS FOR KINASE INHIBITORS USED AS IMMUNOSUPPRESSANTS, 2009-2016 (\$ MILLIONS)	200
FIGURE 76 EMERGING MARKETS FOR KINASE INHIBITORS USED IN AGE-RELATED MACULAR DEGENERATION, 2009-2016 (\$ MILLIONS)	202
FIGURE 77 SHARE OF KINASE INHIBITORS IN EMERGING MARKETS BY APPLICATION, 2010 (%)	203
FIGURE 78 NUMBER OF PATENTS BY YEAR, 2008 TO END OF FEBRUARY 2012	205
FIGURE 79 NUMBER OF PATENTS BY YEAR, 2008 TO END OF FEBRUARY 2012 (%)	206
FIGURE 80 PATENTS BY CATEGORY FOR KINASE INHIBITORS 2008 TO END OF FEBRUARY 2012	207
FIGURE 81 PATENTS BY TYPE FOR TYROSINE KINASE INHIBITORS 2008 TO END OF FEBRUARY 2012	208
FIGURE 82 PATENTS BY TYPE FOR SERINE/THREONINE KINASE INHIBITORS, 2008 TO END OF FEBRUARY 2012	208
FIGURE 83 NUMBER OF U.S. PATENTS BY COUNTRY FOR KINASE INHIBITORS, 2008 TO END OF FEBRUARY 2012	210
FIGURE 84 PATENT SHARES BY COUNTRY FOR KINASE INHIBITORS, 2010-2012 (%)	211
FIGURE 85 PATENTS BY ASSIGNEE FOR KINASE INHIBITORS, 2008 THROUGH END OF FEBRUARY 2012	212