

INTRODUCTION/SUMMARY.....	XVI
THE YEAR 2002 IN REVIEW.....	XVI
BIOTECH	XVI
HOSPITALS	XVI
MEDICAL DEVICES	XVII
BIOMATERIALS	1
RETINAL CELL TRANSPLANT SAVES RAT VISION	1
MOUSE THYMIC CELLS GROW INTO FULL GLAND	1
VIRUS DESTROYS PROSTATE CANCER.....	2
VIRUS DESTROYS PROSTATE CANCER (CONTINUED)	3
VIRAL ENZYME FIGHTS DRUG-RESISTANCE	4
STEM CELLS THAT CONTROL AGING	5
STEM CELLS REPAIR HEART	6
STEM CELLS REPAIR HEART (CONTINUED)	7
BLOOD STEM CELLS TARGET GENES	8
STEM CELLS MAY TREAT LIVER FAILURE	9
STEM CELLS RESTORE RATS AFTER STROKE	10
ANTIBODIES, ENZYMES MAY REPAIR SPINAL DAMAGE	11
CELL THERAPY REDUCES MYOCARDITIS IN MICE	12
PIG GUT REPAIRS KNEE LIGAMENTS IN RABBITS	13
ADULT STEM CELL MAKE CARTILAGE USED IN MICE.....	14
ADULT STEM CELL MAKE CARTILAGE USED IN MICE (CONTINUED).....	15
SYNTHETIC PROTEIN HALTS HUNTINGTON'S DISEASE.....	16
STEM CELLS REPAIR PARKINSON'S DAMAGE	17
STEM CELLS REPAIR PARKINSON'S DAMAGE (CONTINUED).....	18
STEM CELLS MAY YIELD LUNGS	19
ADULT STEM CELLS REPAIR BONE.....	19
CAVE BACTERIA MAY HELP STOP CANCER	20
BODY'S LACTOFERRIN MIGHT BLOCK BIOFILM	21
STEM CELLS MAKE VESSELS AFTER STROKE.....	22
STEM CELLS MAKE VESSELS AFTER STROKE (CONTINUED).....	23
MARROW CELLS TURN INTO LIVER CELLS.....	24
ADULT MARROW CELLS DIFFERENTIATE.....	25
VESSELS DEVELOPED FOR ARTIFICIAL ORGANS.....	26
SELECTIVE NANOFILTERS FOR PROTEINS, DNA.....	27
ECMO KEEPS DONOR ORGANS VIABLE.....	27
BIOENGINEERS CREATE WORKING COW KIDNEYS.....	28
VIRAL VECTORS EXPAND DELIVERY	29
STEM CELLS PRODUCE BONE, CARTILAGE	30
STEM CELLS BOOST STROKE RECOVERY	31

BEATING HEART MUSCLE GROWN	32
FIRST HUMAN ISLET TRANSPLANTS PERFORMED	33
ADULT STEM CELLS COULD COAT STENTS	34
COMPOUNDS TARGET TUMOR BLOOD VESSELS	35
PACEMAKER MADE FROM GUINEA PIG MUSCLE	36
PACEMAKER MADE FROM GUINEA PIG MUSCLE (CONTINUED).....	37
POLYMER MEMBRANE, PROTEIN REMOVE TOXINS	38
BLOOD VESSEL CELLS FROM STEM CELLS	39
UMBILICAL CORD STEM CELLS CULTURED	40
BACTERIAL PROTEIN KILLS TUMORS	41
ADULT STEM CELLS HOLD PROMISE	42
NEURAL STEM CELLS TRACK, DESTROY CANCER	43
VIRAL SHELL DELIVERS WITHOUT SIDE EFFECTS.....	44
COMBINATION FIGHTS KIDNEY CANCER.....	45
COMBINATION FIGHTS KIDNEY CANCER (CONTINUED)	46
ANTIBODY BINDS TO CANCER CELLS	47
MOST STEM CELLS MADE TO TRANSFORM.....	48
TREATMENTS FOR GENETIC DISEASES.....	49
TREATMENTS FOR GENETIC DISEASES (CONTINUED)	50
TREATMENTS FOR GENETIC DISEASES (CONTINUED)	51
 CARDIOLOGY.....	 52
BRAIDED STEEL SHAFT IMPROVES CATHETER.....	52
POLYMER SCREENS OUT COMPLICATIONS	52
ELASTOMERS REPLACE PVC, LATEX.....	53
SIROLIMUS-ELUTING STENT EFFECTIVE	54
STENT ALLOWS LESS INVASIVE PROCEDURE	55
STENT ALLOWS LESS INVASIVE PROCEDURE (CONTINUED).....	56
PLASTIC SLEEVE MAY DISRUPT STENT'S EFFECT.....	57
TITANIUM IMPLANT BOOSTS FAILING HEARTS	58
GENE HALTS HEART FAILURE IN ANIMALS	59
POLYESTER CONTAINS HEART ENLARGEMENT	60
MAGNETIC PARTICLES TAG HEART ATTACKS	61
POLYURETHANE AS ALTERNATIVE TO LATEX	62
POLYMERS OFFER DUAL ACTION.....	63
POLYMER ALLOWS EASY STENT CONTROL	64
THERAPY IMPROVES HEART FUNCTION	65
TITANIUM DEVICE LENGTHENS ARTERIES.....	66
TITANIUM DEVICE LENGTHENS ARTERIES (CONTINUED)	67
 DERMATOLOGY.....	 68
POLYMER LIP IMPLANT REPLACES COLLAGEN, FAT	68
HEMOGLOBIN EMULSION SMOOTHES WRINKLES	69

SILICONE EMULSION FIGHTS SKIN DISEASE	70
SKIN PEPTIDE COULD TREAT INFECTION	71
YEAST-DERIVED GEL AVOIDS INFECTION RISK.....	72
YEAST-DERIVED GEL AVOIDS INFECTION RISK (CONTINUED).....	73
DIAGNOSTICS.....	74
U.S. MARKET FOR MEDICAL IMAGING AND RELATED PRODUCTS TO REACH NEARLY \$10 BILLION BY 2007.....	74
<i>TABLE 1 U.S. USER EXPENDITURES FOR MEDICAL IMAGING EQUIPMENT AND RELATED PRODUCTS, THROUGH 2007 (\$ MILLIONS).....</i>	75
<i>FIGURE 1 U.S. USER EXPENDITURES FOR MEDICAL IMAGING EQUIPMENT AND RELATED PRODUCTS, 2000, 2001, 2002 AND 2007 (\$ MILLIONS).....</i>	76
CHILLED NEUTRONS MAY SOLVE MEMBRANE PUZZLES.....	76
CHILLED NEUTRONS MAY SOLVE MEMBRANE PUZZLES (CONTINUED).....	77
MARROW STEM CELLS MAKE BLOOD VESSELS.....	78
RIGID PLASTIC ELIMINATES MOISTURE	78
POLYMER FILM BRINGS RAPID RESULTS.....	79
ANTIGEN TEST GETS POSITIVE RESULTS	80
DRY CONTROLS ADDED TO THIN FILM TESTS	81
NANOPARTICLES FOR EARLY CANCER DETECTION	82
NANOPARTICLES FOR EARLY CANCER DETECTION (CONTINUED).....	83
NANOPARTICLES FOR EARLY CANCER DETECTION (CONTINUED).....	84
DRUG DELIVERY.....	85
POLYMER COATING BLOCKS PREMATURE ABSORPTION	85
MICROSPHERES PROVIDE SUSTAINED RELEASE	85
MICROSPHERES PROVIDE SUSTAINED RELEASE (CONTINUED).....	86
POLYMER IMPLANT HELPS DENDRITIC CELL VACCINES	87
TECHNOLOGY MOVES ENZYMES TO CELLS	88
DISPOSABLE CAPSULES SPEED TIME TO MARKET.....	89
S-LAYERS OFFER FILTRATION PROMISE.....	90
METAL-FILLED, SOLUBLE, BUCKYBALLS MAY DELIVER.....	91
HYDROGEL CHAMBERS HELP DRUG SCREENINGS	91
HYDROGEL CHAMBERS HELP DRUG SCREENINGS (CONTINUED).....	92
UNIFORM MICROSPHERES GIVE PRECISE CONTROL	93
FROM A SINGLE DNA STRAND, A TINY MOTOR.....	94
FROM A SINGLE DNA STRAND, A TINY MOTOR (CONTINUED).....	95
POLYMER BALLOON TREATS INCISION PAIN DIRECTLY	96

GROWTH FACTOR DESTROYS TUMORS.....	97
GROWTH FACTOR DESTROYS TUMORS (CONTINUED)	98
INJECTABLE POLYMERS BECOME SOLID IMPLANT	99
IRON VEHICLES TARGET DISEASE.....	99
IRON VEHICLES TARGET DISEASE (CONTINUED)	100
POLYMER-DRUG COMBO SAFE AND EFFECTIVE	101
PORES HELP NANOGATE DELIVER	101
PORES HELP NANOGATE DELIVER (CONTINUED).....	102
SYNTHETIC FAT ENCASES ANTICANCER AGENTS.....	103
DEVICE DOUBLES AS TISSUE SCAFFOLD	104
CHIPS COMPUTERIZE DRUG DELIVERY	105
ULTRASONIC PATCH MONITORS INSULIN	106
ULTRASONIC PATCH MONITORS INSULIN (CONTINUED).....	107
 ENDOCRINOLOGY	 108
SHAPE-MEMORY METAL ALLOWS SMALL STENT.....	108
 GASTROENTEROLOGY	 109
POLYURETHANE STENT VALVE STOPS REFLUX	109
POLYURETHANE STENT VALVE STOPS REFLUX (CONTINUED).....	110
 GYNECOLOGY	 111
BUFFERING POLYMER HALTS GERMS, SPERM.....	111
BUFFERING POLYMER HALTS GERMS, SPERM (CONTINUED).....	112
 HEMATOLOGY	 113
BOVINE INFUSIONS REPLACE RED BLOOD	113
MINERAL PRODUCT STOPS BLEEDING IN SECONDS.....	114
BLOOD SUBSTITUTE SUCCEEDS IN ANIMALS.....	115
BLOOD SUBSTITUTE SUCCEEDS IN ANIMALS (CONTINUED).....	116
 IMAGING.....	 117
MANGANESE TECHNOLOGY SAFE FOR MRI	117
MORE-UNIFORM CARBON NANOTUBES.....	117
MORE-UNIFORM CARBON NANOTUBES (CONTINUED)	118
COATINGS SHIELD MRI IMPLANTS	119
COATINGS SHIELD MRI IMPLANTS (CONTINUED).....	120
 INDUSTRY NEWS	 121
BOSTON SCIENTIFIC BUYS SMART THERAPEUTICS.....	121
ATRIX IN DEAL WITH PHARMASCIENCE.....	121
AVENTIS BUYS GENE DELIVERY	122

ONE BILLION UNITS OF BLOOD FACTOR.....	123
FMC BUYS PRONOVA BIOMED.....	124
SINCLAIR SIGNS U.S. GELCLAIR DISTRIBUTOR.....	124
VASOMEDICAL NAMED TO 'FAST 50'.....	125
MEDICAL SERVICES GETS FIRST ORDER.....	126
STELLAR, G. POHL REACH AGREEMENT.....	127
FLAMEL SIGNS MEDUSA DEAL.....	128
SICOR, EPIC AGREE TO DEVELOP DEPOT.....	128
CORDIS ACQUIRES CATHETER MAKER.....	129
LAM SIGNS EXYGEN FOR QUALITY CONTROL.....	130
MILLENNIUM MERGES WITH COR THERAPEUTICS.....	131
BIOPHAGE IN PACT WITH BIOPOLYMER.....	132
ALLIANCE, INHALE TEAM UP ON PULMOSPHERES.....	132
ALLIANCE, INHALE TEAM UP ON PULMOSPHERES (CONTINUED).....	133
CORGENIX, RHIGENE INK DISTRIBUTION AGREEMENT.....	134
POLYMER EXPANDS INCONTINENCE TEST.....	135
BAXTER BUYS FUSION MEDICAL.....	135
ABBOTT BUYS STENT BUSINESS.....	136
ABBOTT BUYS STENT BUSINESS (CONTINUED).....	137
SURVEY SHOWS RISE IN DENTAL IMPLANTS.....	138
PROTEIN POLYMER, SPINE WAVE EXPAND CONTRACT.....	138
PROTEIN POLYMER, SPINE WAVE EXPAND CONTRACT (CONTINUED).....	139
MEDTRONIC COMPLETES PURCHASE OF VIDAMED.....	140
GENZYME, EXACTECH TO DEVELOP ORTHOPEDICS.....	140
NEXMED CREAMS ERECTILE DYSFUNCTION.....	141
REGENESIS BIOMEDICAL GETS SERIES A FINANCING.....	142
BIOMERICA AND PISA SIGN MARKETING DEAL.....	143
ANGIOPLASTY BEATS CLOT-BUSTING DRUGS.....	143
ANGIOPLASTY BEATS CLOT-BUSTING DRUGS (CONTINUED).....	144
SAFETY NEEDLE LINE LAUNCHED.....	145
REPEAT STENTING INEFFECTIVE.....	145
REPEAT STENTING INEFFECTIVE (CONTINUED).....	146
IMPLANT BEATS USUAL TREATMENT.....	147
THERASPHERE REDUCES LIVER TUMORS.....	148
EARLY RESULTS FOR DRUG-ELUTING STENT.....	149
BAXTER COMPLETES PURCHASE OF FUSION.....	150
HEALTHPOINT TO MARKET OASIS.....	151
AASTROM MAKES ITALIAN DEAL.....	151
ENDOVASC SIGNS MIV AGREEMENT.....	152
COSEAL REDUCES ADHESIONS IN STUDY.....	153
BD LAUNCHES RETRACTING SYRINGE.....	154

BAXTER, NORTHWESTERN TO COLLABORATE	155
PRONEURON, CRAIG HOSPITAL START JOINT PROGRAM	155
RETRACTABLE SIGNS WITH CHINESE FIRM.....	156
FIRST POLYLOK LUMBAR DEVICE IMPLANTED.....	157
MEDAREX, IDM SIGN TO DEVELOP CELL DRUGS	157
LAM WOUND GEL LAUNCHED.....	158
SPAN-AMERICA BUYS SECURE IV FROM VADUS	159
PFIZER BUYS PHARMACIA FOR \$60 BILLION.....	160
MEDTRONIC TO ACQUIRE SPINAL DYNAMICS.....	161
ETHICON BUYS SWEDISH GASTRIC BAND	162
GUIDANT TO BUY ANGIOTECH	163
LYNX SIGNS STEM CELL AGREEMENT WITH CUE	164
EXHALE LICENSES FROM BRIGHAM	165
VIRAGEN IN ANTI-CANCER DEAL.....	165
MORPHOSYS DELIVERS ANTIBODIES TO CENTOCOR	166
BIOMED COMPLETES GLUE AGREEMENT.....	167
PREMIER CONTRACTS FOR WOUND CARE.....	167
GENZYME INKS CELL AGREEMENT.....	168
CORIXA ENTERS PURCHASE AGREEMENT	169
B&L MOVES LENSES TO IRELAND.....	170
MICROSCIENCE TO LICENSE BIO-DELIVERY PRODUCT.....	170
STEM CELL GRANT RENEWED FOR GERON.....	171
FINAL RESULTS FOR DRUG-ELUTING STENT	172
PLATINUM COILS BEAT CLIPPING	173
ENCELLE CLOSES FUNDING, BEGINS COLLABORATION	174
LAM SIGNS TWO AGREEMENTS IN CHINA	175
ADVANCED TISSUE FILES CHAPTER 11	176
INAMED AND GENZYME SIGN HYLAFORM DEAL	177
COLUMBIA TEAMS WITH ARDANA FOR BIOADHESIVE.....	177
NABI SIGNS AGREEMENTS FOR BIOMATERIAL	178
ABBOTT WILL BUILD IN PUERTO RICO.....	179
POSITIVE RESULTS FOR STENT, GUIDEWIRE	180
BD LAUNCHES SHORTEST INSULIN PEN NEEDLE.....	180
BRIEFLY NOTED	181
ADVANCED POLYMERS EXPANDS PRODUCT LINES.....	181
ROYAL PHILIPS ELECTRONICS GETS WARNING LETTER	
FROM FDA	182
AMERICAN PHARMACEUTICAL PARTNERS NAMES PRICE	
OF ITS COMMON STOCK.....	182
BAUSCH AND LOMB TO RESTRUCTURE.....	182
ADVANCED POLYMERS EXPANDS LINE OF PET HEAT	
SHRINK TUBING SIZES.....	183
BOSTON SCIENTIFIC SEES BENEFITS OF STENTING TO	
TREAT THE HEART.....	183

TEC INTERFACE SYSTEMS AMONG “FAST 50” INNOVATORS	184
LIFENET TO SUPPLY SKIN TISSUE TO LIFECELL.....	184
STERION ACQUIRES SURGIDYNE	184
CRUCCELL AND CENTOCOR ACHIEVE FIRST GOAL	185
EXACTECH SIGNS AGREEMENT WITH WALDEMAR LINK GMBH AND LINK AMERICA	185
AMERICAN HOME PRODUCTS CHANGES NAME AND TRADING SYMBOL.....	185
CORIXA CORP. AND ADVANCED DIAGNOSTIC AND CELLULAR SYSTEMS TO DEVELOP TESTS FOR BREAST CANCER	186
SANGUIBIOTECH TO MARKET HEMOGLOBIN EMULSION OXYGEN CARRIER PRODUCTS.....	186
AVI BIOPHARMA CLOSED PRIVATE EQUITY FINANCING	186
BIOVAIL CORP. ANNOUNCE UNDERWRITING FOR A PUBLIC OFFERING	187
MEDLINE INDUSTRIES SIGNS AGREEMENT WITH AMD- RITMED	187
JOHNSON AND JOHNSON BUYS TIBOTEC-VIRCO NV.....	187
ESTRADOT IS LAUNCHED BY NOVARTIS PHARMA.....	187
OTTO BOCK HEALTH CARE INTEGRATES SPRINGLITE’S FEET	188
AVITAR DEVELOPS HYDRASORB PLUS.....	188
ADVANCED MEDICAL SOLUTIONS GROUP COLLABORATES WITH J&J’S WOUND MANAGEMENT.....	188
FTC REVIEWING GENZYME’S ACQUISITION OF NOVAZYME PHARMACEUTICALS.....	188
SULZER MEDICA AWARDED ONE-BILLION-DOLLAR SETTLEMENT	189
CARDIOTECH GETS FDA OK TO MARKET HYDROGEL WOUND AND BURN DRESSING.....	189
WESTAIM CORP. TO SELL ETHYLENE COATINGS BUSINESS	189
3M HEALTH CARE INTRODUCES TWO TEGADERM IV DRESSINGS	190
COLOPLAST, DENMARK TO MARKET ROCHESTER MEDICAL’S FOLEY CATHETERS	190
THERMOGENESIS SIGNS DISTRIBUTION AGREEMENT WITH MINOGUE MEDICAL.....	190
DERMA SCIENCES TO BUY DUMEX MEDICAL ASSETS AND BUSINESS OPERATIONS	191
KENSEY NASH AND ORAPHARMA FORM PARTNERSHIP.....	191

CYTOMEDIX ISSUES AUTOLOGEL LICENSING	
AGREEMENT TO PROVIDENCE HOME CARE.....	191
BAUSCH & LOMB TO DOUBLE SIZE OF ITS DISTRIBUTION	
CENTER.....	192
VISION-EASE LENS RESUMES TAKING ORDERS FOR	
CONTINUA D28 LENS.....	192
ADVANCED NEUROMODULATION SYSTEMS ANNOUNCES	
1,000TH IMPLANT OF GENESIS.....	192
TYCO HEALTHCARE AND NOVATION TO MULTI-SOURCE	
CONTRACTS	192
GENZYME BIOSURGERY AND GUIDANT SIGN CROSS-	
LICENSE AGREEMENT	193
INDUSTRY OUTLOOK.....	194
THE YEAR PAST, THE YEAR AHEAD	194
TRENDS IN THE MAKING.....	195
BIOMATERIALS.....	196
CARDIOLOGY	197
DERMATOLOGY	198
DRUG DELIVERY	198
GYNECOLOGY	199
HEMATOLOGY.....	199
ONCOLOGY	199
OPHTHALMOLOGY.....	200
ORTHODONTICS	201
ORTHOPEDICS	201
Orthopedics (Continued)	202
PULMONARY	203
WOUNDS/TISSUE REPLACEMENT.....	204
Wounds/Tissue Replacement (Continued).....	205
INTERNAL MEDICINE.....	206
POLYMER IMPLANT CHECKS BLOOD FLOW	206
POLYMER IMPLANT CHECKS BLOOD FLOW (CONTINUED)....	207
LEGAL AND REGULATORY	208
FDA APPROVES BONE COMPRESSION DEVICE	208
DELIVERY TECHNOLOGY INFRINGED, COURT SAYS.....	208
NOVARTIS GETS FDA NOD.....	209
CDC COMPLETES CRYOLIFE TESTING	210
ISOSLEEVE GETS FDA APPROVAL.....	210
COMMITTEE VOTES FOR GLIADEL WAFER	211
COURT RULES FOR IGEN	212
FDA CLEARS DERMABOND FOR MICROBE PROTECTION	213
FDA APPROVAL LETTER GOES TO VIVELLE-DOT	214

FDA PANEL OKs BONE GRAFT	214
FDA PANEL OKs BONE GRAFT (CONTINUED).....	215
COURT RULES DEPUY INFRINGED INTERPORE	216
AASTROM'S KIT GETS CE MARK.....	217
SULZER REACHES TERM SHEET AGREEMENT	218
ZILA GETS ANOTHER PATENT FOR ORATEST.....	219
HEALTHPOINT WINS STRATUS LAWSUIT.....	219
MEDTRONIC GETS CLEARANCE FOR VALVE	220
FDA CLEARS SPINAL IMPLANT	221
HEMOLINK NOT CLEARED FOR CANADA THIS YEAR.....	222
SIROLIMUS-ELUTING STENT GETS CE MARK	223
NEOPHARM FILES FOR ARBITRATION	224
TRICUSPID VALVE GETS FDA NOD.....	224
VIVELLE-DOT GETS EXPANDED APPROVAL	225
FDA CLEARS DRESSING FOR CHRONIC WOUNDS	226
FDA OKAYS WOUND GEL.....	227
SPINAL IMPLANT GETS FDA APPROVAL.....	227
APPROVAL INCREASES USES FOR SOFT TPE.....	228
PARTIAL EUROPEAN APPROVAL FOR INTERCEPT	229
DISTRIBUTION AGREEMENT FOR WOUND GEL.....	230
DISTRIBUTION AGREEMENT FOR WOUND GEL (CONTINUED).....	231
FDA REQUIRES POST MARKET REPORTS	232
ATRIX SUSPENSION PRODUCT APPROVED	232
FDA CLEARS HYDROFIBER WOUND DRESSING.....	233
NEURON GETS CLEARANCE FOR LUMBAR CATHETER.....	234
LUMBAR GRAFT GETS FDA NOD	234
NON-APPROVABLE LETTER FOR RISPERDAL CONSTA.....	235
STENT GETS FDA GO.....	236
FDA APPROVES POLYMER COATING	237
ANTI-ADHESION HYDROGEL APPROVED.....	238
FDA CLEARS TEST FOR LUPUS.....	239
U.S. SURGICAL GETS NOD FOR INDERMIL.....	240
BONE REPAIR PRODUCT APPROVED IN EUROPE	240
CRYOLIFE REACHES AGREEMENT WITH FDA.....	241
APPLIED MEDICAL GETS INJUNCTION AGAINST TYCO.....	242
PANEL OKs APPROVAL FOR BONE PROTEIN	243
EUROPE APPROVES SCION'S CLO-SUR.....	244
BRIEFLY NOTED	244
LAM PHARMACEUTICAL FILES PREMARKET NOTIFICATION FOR IPM WOUND GEL.....	244
THERMOGENESIS GETS APPROVAL INVESTIGATIONAL DEVICE EXEMPTION FROM FDA.....	245

NEOPHARM'S SS1-PE38 GRANTED ORHPAN DRUG STATUS BY FDA.....	245
CALIPER TECHNOLOGIES GETS 2001 LITIGATION SETTLEMENT PAYMENT FROM ACLARA BIOSCIENCES	246
TWO PATENT INFRINGEMENT LAWSUIT SETTLEMENTS ANNOUNCED	246
NEUROLOGY.....	247
COOLING DEVICE TREATS MIGRAINES	247
PEPTIDE TRIGGERS SPINAL CORD GROWTH.....	248
GAS MAY PROTECT DAMAGED NERVES.....	249
BIORESORBABLE POLYMER RESTORES HAND CONTROL.....	250
ONCOLOGY.....	251
DUMMY RECEPTORS REDUCE TUMOR SIZE	251
NANOCIRCLES SHUT DOWN DISEASE GENES.....	252
GLASS BEADS EXTEND CANCER SURVIVAL.....	253
ENGINEERED VIRUS SNITCHES ON CANCER.....	254
ENGINEERED VIRUS SNITCHES ON CANCER (CONTINUED).....	255
NANOPARTICLE, GENE CUT TUMOR BLOOD SUPPLY	256
CHIPS IMPORTANT IN CANCER PROGNOSIS.....	257
COMPLEX CAUSES MELANOMA REGRESSION	258
POLYVINYL EMBOLIZATION DEVICE LAUNCHED	258
POLYVINYL EMBOLIZATION DEVICE LAUNCHED (CONTINUED).....	259
OPHTHALMOLOGY	260
PLASTIC LENSES BEAT STEEL	260
HYDROGEL LENSES RESIST INFECTION	260
HYDROGEL LENSES RESIST INFECTION (CONTINUED).....	261
POLYMER BAND MIGHT RESTORE VISION.....	262
POLYMER IMPLANT DELIVERS FOR 3 YEARS	263
LENS BIOCOMPATIBLE, BACTERIA RESISTANT.....	264
IMPLANT CORRECTS REFRACTIVE ERROR	265
POLYMER IMPLANT REDUCES EYE AILMENTS.....	265
LIGHT COULD REPAIR EYE INJURIES	266
LIGHT COULD REPAIR EYE INJURIES (CONTINUED).....	267
CHIP TRIGGERS SIGHT FOR BLIND	268
FIGHTING BACTERIA ON CONTACT LENSES	269
FIGHTING BACTERIA ON CONTACT LENSES (CONTINUED).....	270
ORTHOPEDICS.....	271
METAL HIPS TRUMP PLASTIC	271

ADULT STEM CELLS REBUILD LIGAMENTS.....	271
ADULT STEM CELLS REBUILD LIGAMENTS (CONTINUED) ...	272
MATRIX ALLOWS 100% BONE PRODUCT	273
CULTURED CHONDROCYTE SHOWS POTENTIAL	273
CULTURED CHONDROCYTE SHOWS POTENTIAL (CONTINUED).....	274
COLLAGEN PUTTY HOLDS SPINE FUSION PROTEINS	275
POLYMER SCREWS DOWN ACL RECONSTRUCTION	276
COMPOUND ALLOWS HAIR-LIKE NANOTUBES	276
GLASS MAY REPAIR BONE, TREAT ARTHRITIS.....	277
SEA SPONGE MAY YIELD ARTHRITIS RELIEF.....	278
GENSCI'S DYNAGRAFT REFORMULATED	278
COMPOSITE HIP MATCHES BONE STIFFNESS.....	279
COMBO MAY REPLACE DISCS.....	280
ELASTOMER-TITANIUM DISC CUSHIONS VERTEBRAE	281
COMPOSITE IMPLANT FUSES SPINE	282
COMPOSITE FOR ARTIFICIAL MUSCLE	283
HEART VALVE RING IS MORE DURABLE	284
SYNTHETIC MOLECULE SPEEDS FRACTURE HEALING.....	285
STRONGER METAL FOR IMPLANTS.....	286
COATINGS OFFER SURFACE CONTROL.....	287
COATINGS OFFER SURFACE CONTROL (CONTINUED)	288
 PERIODONTAL.....	 289
GTR BARRIER ADDS ANTIBIOTIC	289
 PROCESS TECHNOLOGY	 290
POLAR CRYSTAL MAY PURIFY DRUGS	290
SYSTEM ALLOWS CYCLICAL TESTING	290
SILICA MIST IMPROVES MEMBRANES	291
VECTOR PROCESS GETS BIGGER YIELD	292
DEDUSTER IMPROVES PRODUCTIVITY, PROFITS.....	293
TFF TOOLS ENHANCE DRUG DEVELOPMENT	293
TFF TOOLS ENHANCE DRUG DEVELOPMENT (CONTINUED).....	294
TFF TOOLS ENHANCE DRUG DEVELOPMENT (CONTINUED).....	295
 PULMONARY.....	 296
ACRYLIC RESIN AIDS JAW POSITIONING	296
POLYMER LUNG SHOWING PROMISE.....	296
POLYMER LUNG SHOWING PROMISE (CONTINUED)	297
 RADIOLOGY	 298
CARBON NANOTUBES MAY IMPROVE X-RAYS.....	298

CARBON NANOTUBES MAY IMPROVE X-RAYS (CONTINUED).....	299
UROLOGY	300
MICROCRIMPING FIBERS IMPROVES CLEARANCE.....	300
SILICONE INSERT TAMES INCONTINENCE.....	301
CERAMIC PARTICLES BIND PHOSPHATES	302
POLYMER CREAM IMPROVED FOR ERECTILE DYSFUNCTION	303
IMPLANT DESIGNED FOR KEYHOLE REPAIR	304
VASCULAR.....	305
POLYETHYLENE GLYCOL BREAKS DOWN GOUT	305
WOUND/TISSUE REPLACEMENT	306
POLYMER PARTICLES HALT BLEEDING	306
EPTFE SELF-ADHESIVE, RAPID LOADING	307
71% MAINTAIN WOUND CLOSURE.....	307
SILICONE INSERT BEATS INCONTINENCE	308
POLYMER MICROSPHERE AIDS ULCER TREATMENT.....	309
WHEELCHAIR CUSHION ADDS AIRFLOW	310
SILICONE PADS THE WAY	310
SHAPE-MEMORY PLASTIC CAN TIE KNOTS.....	311
SHAPE-MEMORY PLASTIC CAN TIE KNOTS (CONTINUED)	312
GROWTH FACTOR PROTECTS SKIN.....	313
KERATIN MATERIALS AID TISSUE GROWTH	314
SILVER DELIVERS TO DEEP WOUNDS.....	314
BANDAGE COULD REPAIR TISSUES.....	315
ELASTIC POLYMER CLOSER TO NATURAL TISSUE	316
OXYGEN CARRIER WORKS IN CHRONIC CASES	317
POLYMER MATRIX WITH A SILVER LINING	318
POLYMER INTERACTS WITH EXUDATE	319
BIOPOLYMER FOR POTENT COAGULATION.....	320
SILICONE SHEETING PREVENTS SCARRING	320
FASTEST ABSORBED SUTURE LAUNCHED.....	321
POLYURETHANE ABSORBS FIVE TIMES ITS WEIGHT	322
POWDER EFFECTIVE FOR SURGICAL HEMOSTASIS	323
BRIEFLY NOTED	323
U.S. ARMY LAB TREATS WOUNDS WITH DENDRIMER NANOCOMPOSITES	323
SPAN-AMERICA MEDICAL SYSTEMS INTRODUCE EQUALIZER CUSHION	324