

Gene Therapy Market by Type (Gene silencing, Gene augmentation), Vector (Viral (Retroviral, AAV), Non-viral (Oligonucleotide)), Therapeutic Area (Neurology, Oncology), Delivery Method (In-vivo, Ex-vivo), RoA (Intravenous) & Region - Global Forecast to 2028

Market Report | 2023-10-30 | 276 pages | MarketsandMarkets

AVAILABLE LICENSES:

- Single User \$4950.00
- Multi User \$6650.00
- Corporate License \$8150.00
- Enterprise Site License \$10000.00

Report description:

The gene therapy market is expected to reach USD 23.9 billion by 2028 from USD 9.0 billion in 2023, at a CAGR of 21.4% during the forecast period. The key factors driving the growth of the gene therapy market include increasing initiatives related to genomic research, and increasing number of regulatory approvals for gene therapy products. Moreover, growing demand for cell and gene therapies is an opportunity area for this market.

The gene therapy market has been segmented based on type, vector, therapeutic area, delivery method, route of administration and region.

"By therapeutic area, oncology segment accounted for the second largest share of the gene therapy market"

Based on type, the gene therapy market is categorized into neurology, oncology, hepatology, and other therapeutic areas.. In

2022, oncology accounted for the highest growth rate owing to factors such as The rising demand for targeted therapies
(including gene therapy) against cancer, increasing cancer prevalence are the major factors driving the growth of this segment.

"By delivery method, the in vivo segment accounted for the largest share in the gene therapy market"

Based on end user, the gene therapy market is segmented into the gene therapy market is segmented into in vivo and ex vivo. In

2022, the in vivo segment accounted for a largest share of the gene therapy market. Growth in this market segment can be attributed to availability of many in vivo gene therapy products commercially and focus of research and development on this delivery method.

"North America: the largest share of the gene therapy market"

Scotts International. EU Vat number: PL 6772247784 tel. 0048 603 394 346 e-mail: support@scotts-international.com www.scotts-international.com

North America accounted for the largest share of the gene therapy market. The large share of the North America region can be attributed to major factors such presence of technologically advanced infrastructure in healthcare settings offering gene therapies, and easy accessibility to advanced therapeutics among others. Besides, the region has a well established healthcare system which further supports the growth of this market. Also, presence of some of the key players in the market is another key factor. Some examples of these players include Novartis AG (Switzerland), Biogen Inc. (US), Gilead Sciences, Inc. (US), Bristol-Myers Squibb (US), Alnylam Pharmaceuticals, Inc. (US), Sarepta Therapeutics, Inc. (US) among others.

"Europe: The fastest-growing region in the gene therapy market."

The Europe gene therapy market is projected to grow at the highest CAGR during the forecast period. This is attributed to one of the major factors including the growing initiatives for advancements of gene therapies, increasing prevalence of chronic diseases and support offered by the government organizations for developing advanced targeted therapies.

The primary interviews conducted for this report can be categorized as follows:

- -□By Respondent: Supply Side- 70% and Demand Side 30%
- By Designation: Managers 45%, Directors- 30%, and Executives 25%
- By Country: North America- 25%, Europe- 25%, Asia Pacific- 40%, Latin America- 5%, and Middle East- 3% & Africa- 2%

Prominent Players

- Novartis AG (Switzerland)
- -□Biogen Inc. (US)
- -□Gilead Sciences, Inc. (US)
- -□Bristol-Myers Squibb (US)
- -□ Alnylam Pharmaceuticals, Inc. (US)
- -□ Sarepta Therapeutics, Inc. (US)
- -□Amgen, Inc. (US)
- -□Orchard Therapeutics Plc (UK)
- -□F. Hoffmann-La Roche Ltd. (Switzerland)
- -□Jazz Pharmaceuticals Plc (Ireland)
- -□uniQure N.V. (Netherlands)
- -□Johnson & Johnson (US)
- -□Bluebird Bio, Inc. (US)
- -□BioMarin Pharmaceutical Inc. (US)
- -□ Krystal Biotech, Inc. (US)
- -□Shanghai Sunway Biotech Co. Ltd. (China)
- SIBIONO GeneTech Co. Ltd. (China)
- -□Ferring B.V. (Switzerland)
- | Vertex Pharmaceuticals Incorporated (US)
- -□Pfizer, Inc. (US)
- -□Sangamo Therapeutics, Inc. (US)
- -□REGENXBIO (US)
- -□Ultragenyx Pharmaceutical Inc. (US)
- -□MeiraGTx Holdings Plc (US)
- -[]AnGes, Inc. (Japan)

Research Coverage:

This report provides a detailed picture of the gene therapy market. It aims at estimating the size and future growth potential of the market across different segments, such as the type, indication, end user and region (North America, Europe, Asia Pacific, Latin America, Middle East and Africa). The report also includes an in-depth competitive analysis of the key market players, along with their company profiles, recent developments, and key market strategies.

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

Key Benefits of Buying the Report:

The report will help market leaders/new entrants by providing them with the closest approximations of the revenue numbers for the gene therapy market and its segments. It will also help stakeholders better understand the competitive landscape and gain more insights to better position their business and make suitable go-to-market strategies. This report will enable stakeholders to understand the market's pulse and provide them with information on the key market drivers, restraints, trends, opportunities, and challenges.

The report provide insights on the following pointers"

- Analysis of key drivers (growth in regulatory approvals for gene therapy products), opportunities (cell and gene therapy demand), restraint (budget constraints) and challenges (challenges associated with supply chain) influencing the growth of the gene therapy market.
- Product Development/ Innovation: Detailed insights on upcoming technologies, research and development activities, and new product launches in the gene therapy market.
- Market Development: Comprehensive information about lucrative markets- the report analyses the gene therapy market across varied regions.
- Market Diversification: Exhaustive information about new products and service, untapped geographies, recent developments, and investments in the gene therapy market.
- -[Analysis of clinical pipeline data and data on products estimated to be launched during the forecast period.
- Competitive Assessment: In-depth assessment of market shares, growth strategies and product offerings of leading players like Novartis AG (Switzerland), Biogen Inc. (US), Gilead Sciences, Inc. (US), Bristol-Myers Squibb (US), Alnylam Pharmaceuticals, Inc. (US), Sarepta Therapeutics, Inc. (US), Amgen, Inc. (US), Orchard Therapeutics Plc (UK), F. Hoffmann-La Roche Ltd. (Switzerland), among others in the gene therapy market.

Table of Contents:

1□INTRODUCTION□40

- 1.1 STUDY OBJECTIVES 40
- 1.2 | MARKET DEFINITION | 40
- 1.2.1 INCLUSIONS & EXCLUSIONS 41
- 1.3 MARKET SCOPE 41
- 1.3.1 MARKETS COVERED 41

FIGURE 1 GENE THERAPY MARKET SEGMENTATION 41

- 1.3.2 ☐YEARS CONSIDERED ☐ 42
- 1.4 CURRENCY CONSIDERED 42
- 1.5 LIMITATIONS 42
- 1.6□STAKEHOLDERS□43
- 1.7 SUMMARY OF CHANGES 43
- 1.7.1 RECESSION IMPACT 43
- 2 RESEARCH METHODOLOGY 44
- 2.1 RESEARCH DATA 44

FIGURE 2∏RESEARCH DESIGN∏44

- 2.1.1 SECONDARY DATA 45
- 2.1.2 PRIMARY DATA 46

FIGURE 3∏GENE THERAPY MARKET: BREAKDOWN OF PRIMARIES∏46

2.2 MARKET SIZE ESTIMATION OF GENE THERAPY MARKET 47

FIGURE 4☐MARKET SIZE ESTIMATION: SUPPLY-SIDE ANALYSIS☐47

FIGURE 5 MARKET SIZE ESTIMATION FOR GENE THERAPY MARKET: REVENUE SHARE ANALYSIS 48

2.2.1 INSIGHTS FROM PRIMARIES 49

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

FIGURE 6 MARKET VALIDATION FROM PRIMARY EXPERTS 49

FIGURE 7 MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH 50

2.3 GROWTH FORECAST 51

FIGURE 8□GENE THERAPY MARKET: CAGR PROJECTIONS□51

FIGURE 9 GENE THERAPY MARKET: GROWTH ANALYSIS OF DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES 52

2.4□MARKET BREAKDOWN AND DATA TRIANGULATION□53

FIGURE 10 DATA TRIANGULATION METHODOLOGY 53

2.5 RESEARCH ASSUMPTIONS ☐ 54

2.6 RISK ANALYSIS 54

2.7 RECESSION IMPACT ANALYSIS 154

TABLE 1 GLOBAL INFLATION RATE PROJECTIONS, 2021-2027 (% GROWTH) 54

3∏EXECUTIVE SUMMARY∏56

FIGURE 11 GENE THERAPY MARKET, BY TYPE, 2023 VS. 2028 (USD MILLION) 56

FIGURE 12∏GENE THERAPY MARKET, BY VECTOR, 2023 VS. 2028 (USD MILLION)∏57

FIGURE 13 GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2023 VS. 2028 (USD MILLION) 57

FIGURE 14 GENE THERAPY MARKET, BY DELIVERY METHOD, 2023 VS. 2028 (USD MILLION) 58

FIGURE 15∏GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2023 VS. 2028 (USD MILLION)∏58

FIGURE 16 GEOGRAPHICAL SNAPSHOT OF GENE THERAPY MARKET 59

4□PREMIUM INSIGHTS□60

4.1 GENE THERAPY MARKET OVERVIEW 60

FIGURE 17∏INCREASING INVESTMENTS IN GENE THERAPY RESEARCH TO DRIVE GROWTH IN GENE THERAPY MARKET∏60

4.2 NORTH AMERICA: GENE THERAPY MARKET, BY THERAPEUTIC AREA & COUNTRY (2022) 61

FIGURE 18∏NEUROLOGY ACCOUNTED FOR LARGEST SHARE OF NORTH AMERICAN MARKET IN 2022∏61

4.3 GENE THERAPY MARKET, BY VECTOR, 2022 62

FIGURE 19 VIRAL VECTORS SEGMENT TO DOMINATE MARKET DURING FORECAST PERIOD 62

4.4 GENE THERAPY MARKET: GEOGRAPHIC GROWTH OPPORTUNITIES 62

FIGURE 20∏GERMANY TO REGISTER HIGHEST GROWTH DURING FORECAST PERIOD∏62

5∏MARKET OVERVIEW∏63

5.1 INTRODUCTION 63

5.2 MARKET DYNAMICS 63

FIGURE 21 GENE THERAPY MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES 63

5.2.1 □ DRIVERS □ 64

 $5.2.1.1 \verb|| Increasing regulatory approvals for gene therapy products \verb||| 64$

TABLE 2 LIST OF KEY PRODUCT APPROVALS IN GENE THERAPY MARKET, 2021-2023 64

5.2.1.2 Increasing investments in gene therapy research 65

5.2.1.3 Growing technological advancements 66

TABLE 3 LIST OF ADVANCED PLATFORMS LAUNCHED IN GENE THERAPY MARKET, 2022-2023 66

5.2.1.4 Rising prevalence of genetic disorders and cancer 67

5.2.2 RESTRAINTS 67

5.2.2.1 High cost of gene therapy products 67

TABLE 4 COST OF GENE THERAPY PRODUCTS 68

5.2.3 □ OPPORTUNITIES □ 69

5.2.3.1 Rising demand for cell & gene therapies 69

5.2.3.2 Increasing focus on precision medicine 69

5.2.4 CHALLENGES 70

5.2.4.1 Complex manufacturing process 70

5.2.4.2 Short shelf life and supply chain challenges 70

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

5.3 PORTER'S FIVE FORCES ANALYSIS 71

TABLE 5 GENE THERAPY MARKET: PORTER'S FIVE FORCES ANALYSIS 71

5.3.1 THREAT OF NEW ENTRANTS 71

5.3.2 THREAT OF SUBSTITUTES 71

5.3.3 BARGAINING POWER OF SUPPLIERS 11

5.3.4 BARGAINING POWER OF BUYERS 72

5.3.5 INTENSITY OF COMPETITIVE RIVALRY 172

5.4 TECHNOLOGY ANALYSIS 72

5.5 VALUE CHAIN ANALYSIS 73

FIGURE 22 GENE THERAPY MARKET: VALUE CHAIN 73

5.6 □ ECOSYSTEM ANALYSIS □ 74

FIGURE 23∏GENE THERAPY MARKET: ECOSYSTEM MAP∏74

5.7 PATENT ANALYSIS 175

FIGURE 24∏PATENT APPLICATIONS FOR GENE THERAPY PRODUCTS, JANUARY 2012-SEPTEMBER 2023∏75

TABLE 6 GENE THERAPY MARKET: INDICATIVE LIST OF PATENTS 76

5.8 PIPELINE ANALYSIS 76

TABLE 7□GENE THERAPY PRODUCTS IN CLINICAL PIPELINE□76

5.9 SUPPLY CHAIN ANALYSIS 78

FIGURE 25 GENE THERAPY MARKET: SUPPLY CHAIN ANALYSIS 79

TABLE 8∏SUPPLY CHAIN ECOSYSTEM∏80

5.10 REGULATORY LANDSCAPE 81

5.10.1 REGULATORY ANALYSIS 81

5.10.2 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS, BY REGION 81

TABLE 9∏NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS∏81

TABLE 10 EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 82

TABLE 11 ASIA PACIFIC: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS 182

TABLE 12∏REST OF THE WORLD: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS∏83

5.11 PRICING ANALYSIS 83

5.11.1 AVERAGE SELLING PRICE TREND OF KEY PLAYERS 83

TABLE 13∏AVERAGE SELLING PRICE OF GENE THERAPY PRODUCTS∏83

TABLE 14 AVERAGE SELLING PRICE OF GENE THERAPY PRODUCTS, BY DELIVERY METHOD 84

5.12 TRENDS/DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES 184

5.13 NEY CONFERENCES & EVENTS 185

TABLE 15 GENE THERAPY MARKET: DETAILED LIST OF CONFERENCES & EVENTS (2023-2024) 85

5.14 KEY STAKEHOLDERS & BUYING CRITERIA 86

5.14.1 REY STAKEHOLDERS ON BUYING PROCESS 86

FIGURE 26 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR GENE THERAPY PRODUCTS IN HOSPITALS AND CLINICS 86

5.14.2 BUYING CRITERIA FOR GENE THERAPY MARKET 86

FIGURE 27 KEY BUYING CRITERIA FOR HOSPITALS AND CLINICS 86

6□GENE THERAPY MARKET, BY TYPE□87

6.1□INTRODUCTION□88

TABLE 16 GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) 88

6.2∏GENE SILENCING∏88

6.2.1∏HIGH FLEXIBILITY AND PRECISION OFFERED BY GENE SILENCING THERAPIES TO SUPPORT GROWTH∏88

TABLE 17∏GENE SILENCING THERAPY MARKET, BY REGION, 2021-2028 (USD MILLION)∏89

TABLE 18 NORTH AMERICA: GENE SILENCING THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 89

TABLE 19 EUROPE: GENE SILENCING THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 89

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

TABLE 20

ASIA PACIFIC: GENE SILENCING THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION)

TABLE 21

LATIN AMERICA: GENE SILENCING THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION)

6.3

CELL REPLACEMENT

90

6.3.1□LONG-TERM EFFECTS OF CELL REPLACEMENT THERAPY TO BOOST ADOPTION□90

TABLE 22 CELL REPLACEMENT THERAPY MARKET, BY REGION, 2021-2028 (USD MILLION) 91

TABLE 23[NORTH AMERICA: CELL REPLACEMENT THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION)[]91

TABLE 24 EUROPE: CELL REPLACEMENT THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 92

TABLE 25 ASIA PACIFIC: CELL REPLACEMENT THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 92

TABLE 26 \square LATIN AMERICA: CELL REPLACEMENT THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) \square 92

6.4□GENE AUGMENTATION□93

6.4.1 GROWING USE OF GENE AUGMENTATION THERAPY AGAINST MONOGENIC DISORDERS TO FAVOR MARKET GROWTH 93

TABLE 27 \square GENE AUGMENTATION THERAPY MARKET, BY REGION, 2021-2028 (USD MILLION) \square 93

TABLE 28 NORTH AMERICA: GENE AUGMENTATION THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 94

TABLE 29 EUROPE: GENE AUGMENTATION THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 94

TABLE 30 ASIA PACIFIC: GENE AUGMENTATION THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 94

TABLE 31 LATIN AMERICA: GENE AUGMENTATION THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 6.5 OTHER THERAPIES 95

7□GENE THERAPY MARKET, BY VECTOR□96

7.1 INTRODUCTION 97

TABLE 32 GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION) 97

7.2∏VIRAL VECTORS∏97

TABLE 33 GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 98

TABLE 34 GENE THERAPY MARKET FOR VIRAL VECTORS, BY REGION, 2021-2028 (USD MILLION) 98

TABLE 35∏NORTH AMERICA: GENE THERAPY MARKET FOR VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION)∏98

TABLE 36 EUROPE: GENE THERAPY MARKET FOR VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 99

TABLE 37∏ASIA PACIFIC: GENE THERAPY MARKET FOR VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION)∏99

TABLE 38 LATIN AMERICA: GENE THERAPY MARKET FOR VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 99 7.2.1 RETROVIRAL VECTORS 100

TABLE 39 GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 100

TABLE 40∏GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY REGION, 2021-2028 (USD MILLION)∏100

TABLE 41 NORTH AMERICA: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 101

TABLE 42∏EUROPE: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION)∏101

TABLE 43∏ASIA PACIFIC: GENE THERAPY MARKET FOR RETROVIRAL VECTORS. BY COUNTRY. 2021-2028 (USD MILLION)∏101

TABLE 44[]LATIN AMERICA: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION)[]102 7.2.1.1[]Gamma retroviral vectors[]102

7.2.1.1.1 \ Availability of wide range of gamma-retroviral vectors to support market growth \ 102

TABLE 45 GENE THERAPY MARKET FOR GAMMA RETROVIRAL VECTORS, BY REGION, 2021-2028 (USD MILLION) 102

TABLE 46□NORTH AMERICA: GENE THERAPY MARKET FOR GAMMA RETROVIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION)□103

TABLE 47 EUROPE: GENE THERAPY MARKET FOR GAMMA RETROVIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 103
TABLE 48 ASIA PACIFIC: GENE THERAPY MARKET FOR GAMMA RETROVIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 103
TABLE 49 LATIN AMERICA: GENE THERAPY MARKET FOR GAMMA RETROVIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 104

7.2.1.2 Lentiviral vectors 104

7.2.1.2.1 North America to dominate lentiviral vectors market 104

TABLE 50 GENE THERAPY MARKET FOR LENTIVIRAL VECTORS, BY REGION, 2021-2028 (USD MILLION) 105

TABLE 51 NORTH AMERICA: GENE THERAPY MARKET FOR LENTIVIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 105

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

TABLE 52 EUROPE: GENE THERAPY MARKET FOR LENTIVIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 106
TABLE 53 ASIA PACIFIC: GENE THERAPY MARKET FOR LENTIVIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 106
TABLE 54 LATIN AMERICA: GENE THERAPY MARKET FOR LENTIVIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 106
7.2.2 ADENO-ASSOCIATED VIRAL VECTORS 107

7.2.2.1 Growing clinical pipeline of adeno-associated viral vectors to drive growth 107

TABLE 55 GENE THERAPY MARKET FOR ADENO-ASSOCIATED VIRAL VECTORS, BY REGION, 2021-2028 (USD MILLION) 107 TABLE 56 NORTH AMERICA: GENE THERAPY MARKET FOR ADENO-ASSOCIATED VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 108

TABLE 57□EUROPE: GENE THERAPY MARKET FOR ADENO-ASSOCIATED VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION)□108
TABLE 58□ASIA PACIFIC: GENE THERAPY MARKET FOR ADENO-ASSOCIATED VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION)□108

TABLE 59□LATIN AMERICA: GENE THERAPY MARKET FOR ADENO-ASSOCIATED VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION)□109

7.2.3 OTHER VIRAL VECTORS 109

TABLE 60 GENE THERAPY MARKET FOR OTHER VIRAL VECTORS, BY REGION, 2021-2028 (USD MILLION) 109

TABLE 61 NORTH AMERICA: GENE THERAPY MARKET FOR OTHER VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 110

TABLE 62 EUROPE: GENE THERAPY MARKET FOR OTHER VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 110

TABLE 63 ASIA PACIFIC: GENE THERAPY MARKET FOR OTHER VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 111

TABLE 64 ATIN AMERICA: GENE THERAPY MARKET FOR OTHER VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 111

7.3 NON-VIRAL VECTORS 111

TABLE 65 GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 111

TABLE 66 GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY REGION, 2021-2028 (USD MILLION) 112

TABLE 67 NORTH AMERICA: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 112

TABLE 68 EUROPE: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 113

TABLE 69 ASIA PACIFIC: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 113

TABLE 70 LATIN AMERICA: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 113

7.3.1 OLIGONUCLEOTIDES 114

7.3.1.1 Oligonucleotides to account for largest share of non-viral vectors market 114

TABLE 71 GENE THERAPY MARKET FOR OLIGONUCLEOTIDES, BY REGION, 2021-2028 (USD MILLION) 114

TABLE 72 NORTH AMERICA: GENE THERAPY MARKET FOR OLIGONUCLEOTIDES, BY COUNTRY, 2021-2028 (USD MILLION) 114

TABLE 73 EUROPE: GENE THERAPY MARKET FOR OLIGONUCLEOTIDES, BY COUNTRY, 2021-2028 (USD MILLION) 115

TABLE 74 ASIA PACIFIC: GENE THERAPY MARKET FOR OLIGONUCLEOTIDES, BY COUNTRY, 2021-2028 (USD MILLION) 115

TABLE 75 LATIN AMERICA: GENE THERAPY MARKET FOR OLIGONUCLEOTIDES, BY COUNTRY, 2021-2028 (USD MILLION) 115

TABLE 76 GENE THERAPY MARKET FOR OTHER NON-VIRAL VECTORS, BY REGION, 2021-2028 (USD MILLION) 116 TABLE 77 NORTH AMERICA: GENE THERAPY MARKET FOR OTHER NON-VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 116

TABLE 78 EUROPE: GENE THERAPY MARKET FOR OTHER NON-VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 117
TABLE 79 ASIA PACIFIC: GENE THERAPY MARKET FOR OTHER NON-VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 117
TABLE 80 AMERICA: GENE THERAPY MARKET FOR OTHER NON-VIRAL VECTORS, BY COUNTRY, 2021-2028 (USD MILLION) 117
8 GENE THERAPY MARKET, BY THERAPEUTIC AREA 118

8.1 INTRODUCTION 119

7.3.2∏OTHER NON-VIRAL VECTORS∏116

TABLE 81 \square GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION) \square 119 8.2 \square NEUROLOGY \square 119

8.2.1 GROWING NUMBER OF GENE THERAPY PRODUCTS APPROVED FOR NEUROLOGICAL DISEASE TREATMENT TO DRIVE MARKET GROWTH 119

TABLE 82 GENE THERAPY MARKET FOR NEUROLOGY, BY REGION, 2021-2028 (USD MILLION) 120

Scotts International, EU Vat number: PL 6772247784

TABLE 83 NORTH AMERICA: GENE THERAPY MARKET FOR NEUROLOGY, BY COUNTRY, 2021-2028 (USD MILLION) 120 TABLE 84 EUROPE: GENE THERAPY MARKET FOR NEUROLOGY, BY COUNTRY, 2021-2028 (USD MILLION) 121 TABLE 85 ASIA PACIFIC: GENE THERAPY MARKET FOR NEUROLOGY, BY COUNTRY, 2021-2028 (USD MILLION) 121 TABLE 86 LATIN AMERICA: GENE THERAPY MARKET FOR NEUROLOGY, BY COUNTRY, 2021-2028 (USD MILLION) 121 8.3 ONCOLOGY 122

8.3.1 GROWING DEMAND FOR TARGETED THERAPIES AGAINST CANCERS TO DRIVE MARKET GROWTH 122 TABLE 87 PIPELINE PRODUCTS FOR ONCOLOGY APPLICATIONS 122

TABLE 88 NUMBER OF NEW CANCER CASES, BY TYPE, 2020 VS. 2040 123

TABLE 89 GENE THERAPY MARKET FOR ONCOLOGY, BY REGION, 2021-2028 (USD MILLION) 124

TABLE 90∏NORTH AMERICA: GENE THERAPY MARKET FOR ONCOLOGY, BY COUNTRY, 2021-2028 (USD MILLION)∏124

TABLE 91∏EUROPE: GENE THERAPY MARKET FOR ONCOLOGY, BY COUNTRY, 2021-2028 (USD MILLION)∏125

TABLE 92∏ASIA PACIFIC: GENE THERAPY MARKET FOR ONCOLOGY, BY COUNTRY, 2021-2028 (USD MILLION)∏125

TABLE 93 LATIN AMERICA: GENE THERAPY MARKET FOR ONCOLOGY, BY COUNTRY, 2021-2028 (USD MILLION) 125 8.4 HEPATOLOGY 126

8.4.1 GROWING R&D ACTIVITIES FOR LIVER CONDITIONS TO SUPPORT GROWTH 126

TABLE 94 GENE THERAPY MARKET FOR HEPATOLOGY, BY REGION, 2021-2028 (USD MILLION) 126

TABLE 95∏NORTH AMERICA: GENE THERAPY MARKET FOR HEPATOLOGY, BY COUNTRY, 2021-2028 (USD MILLION)∏126

TABLE 96[]EUROPE: GENE THERAPY MARKET FOR HEPATOLOGY, BY COUNTRY, 2021-2028 (USD MILLION)[]127

TABLE 97[]ASIA PACIFIC: GENE THERAPY MARKET FOR HEPATOLOGY, BY COUNTRY, 2021-2028 (USD MILLION)[]127

TABLE 98 LATIN AMERICA: GENE THERAPY MARKET FOR HEPATOLOGY, BY COUNTRY, 2021-2028 (USD MILLION) 127 8.5 OTHER THERAPEUTIC AREAS 128

TABLE 99 GENE THERAPY MARKET FOR OTHER THERAPEUTIC AREAS, BY REGION, 2021-2028 (USD MILLION) 128
TABLE 100 NORTH AMERICA: GENE THERAPY MARKET FOR OTHER THERAPEUTIC AREAS, BY COUNTRY, 2021-2028 (USD MILLION) 128

TABLE 101 EUROPE: GENE THERAPY MARKET FOR OTHER THERAPEUTIC AREAS, BY COUNTRY, 2021-2028 (USD MILLION) 129
TABLE 102 ASIA PACIFIC: GENE THERAPY MARKET FOR OTHER THERAPEUTIC AREAS, BY COUNTRY, 2021-2028 (USD MILLION) 129
TABLE 103 AMERICA: GENE THERAPY MARKET FOR OTHER THERAPEUTIC AREAS, BY COUNTRY, 2021-2028 (USD MILLION) 129
9 GENE THERAPY MARKET, BY DELIVERY METHOD 130

9.1∏INTRODUCTION∏131

TABLE 104 \Box GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION) \Box 131 9.2 \Box IN VIVO \Box 131

9.2.1∏IN VIVO DELIVERY METHOD TO ACCOUNT FOR LARGEST MARKET SHARE DURING FORECAST PERIOD∏131

TABLE 105 COMMERCIALIZED AND PIPELINE IN VIVO-BASED GENE THERAPY PRODUCTS 132

TABLE 106[IN VIVO GENE THERAPY MARKET, BY REGION, 2021-2028 (USD MILLION)[132

TABLE 107 NORTH AMERICA: IN VIVO GENE THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 133

TABLE 108 TEUROPE: IN VIVO GENE THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) T133

TABLE 109
☐ASIA PACIFIC: IN VIVO GENE THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION)
☐133

TABLE 110 LATIN AMERICA: IN VIVO GENE THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 134 9.3 TEX VIVO 134

9.3.1 GROWING FOCUS ON ONCOLOGY BY MARKET PLAYERS TO SUPPORT MARKET GROWTH 134

TABLE 111∏COMMERCIALIZED AND PIPELINE EX VIVO-BASED GENE THERAPY PRODUCTS∏135

TABLE 112 \square EX VIVO GENE THERAPY MARKET, BY REGION, 2021-2028 (USD MILLION) \square 135

TABLE 113 NORTH AMERICA: EX VIVO GENE THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 136

TABLE 114 EUROPE: EX VIVO GENE THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 136

TABLE 115∏ASIA PACIFIC: EX VIVO GENE THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION)∏136

TABLE 116 LATIN AMERICA: EX VIVO GENE THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 137

10 GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION 138

Scotts International, EU Vat number: PL 6772247784

10.1∏INTRODUCTION∏139

TABLE 117 GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION) 139

10.2∏INTRAVENOUS∏139

10.2.1 ☐ EFFECTIVENESS OF INTRAVENOUS PRODUCTS TO SUPPORT MARKET GROWTH ☐ 139

TABLE 118 GENE THERAPY MARKET FOR INTRAVENOUS ROUTE OF ADMINISTRATION, BY REGION, 2021-2028 (USD MILLION) 140 TABLE 119 NORTH AMERICA: GENE THERAPY MARKET FOR INTRAVENOUS ROUTE OF ADMINISTRATION, BY COUNTRY, 2021-2028 (USD MILLION) 140

TABLE 120 EUROPE: GENE THERAPY MARKET FOR INTRAVENOUS ROUTE OF ADMINISTRATION, BY COUNTRY, 2021-2028 (USD MILLION) 141

TABLE 121 ASIA PACIFIC: GENE THERAPY MARKET FOR INTRAVENOUS ROUTE OF ADMINISTRATION, BY COUNTRY, 2021-2028 (USD MILLION) 141

TABLE 122□LATIN AMERICA: GENE THERAPY MARKET FOR INTRAVENOUS ROUTE OF ADMINISTRATION, BY COUNTRY, 2021-2028 (USD MILLION)□141

10.3 □ OTHER ROUTES OF ADMINISTRATION □ 142

TABLE 123 GENE THERAPY MARKET FOR OTHER ROUTES OF ADMINISTRATION, BY REGION, 2021-2028 (USD MILLION) 143
TABLE 124 NORTH AMERICA: GENE THERAPY MARKET FOR OTHER ROUTES OF ADMINISTRATION, BY COUNTRY, 2021-2028 (USD MILLION) 143

TABLE 125 EUROPE: GENE THERAPY MARKET FOR OTHER ROUTES OF ADMINISTRATION, BY COUNTRY, 2021-2028 (USD MILLION) 144

TABLE 126 ASIA PACIFIC: GENE THERAPY MARKET FOR OTHER ROUTES OF ADMINISTRATION, BY COUNTRY, 2021-2028 (USD MILLION) 144

TABLE 127□LATIN AMERICA: GENE THERAPY MARKET FOR OTHER ROUTES OF ADMINISTRATION, BY COUNTRY, 2021-2028 (USD MILLION)□144

11 GENE THERAPY MARKET, BY REGION 145

11.1□INTRODUCTION□146

TABLE 128 GENE THERAPY MARKET, BY REGION, 2021-2028 (USD MILLION) 146

11.2 NORTH AMERICA 147

FIGURE 28 NORTH AMERICA: GENE THERAPY MARKET SNAPSHOT 147

TABLE 129 NORTH AMERICA: GENE THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION) 148

TABLE 130 NORTH AMERICA: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) 148

TABLE 131 NORTH AMERICA: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION) 148

TABLE 132∏NORTH AMERICA: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏149

TABLE 133 IN ORTH AMERICA: GENE THERAPY MARKET FOR RETROVIRAL VECTORS. BY TYPE, 2021-2028 (USD MILLION) II 149

TABLE 134 NORTH AMERICA: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 149

TABLE 135 NORTH AMERICA: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION) ☐ 150

TABLE 136∏NORTH AMERICA: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION)∏150

TABLE 137 NORTH AMERICA: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION) 11.2.1 US 151

11.2.1.1 Growing regulatory approvals and availability of advanced treatments to drive market growth 151

TABLE 138 US FDA APPROVALS FOR GENE THERAPY PRODUCTS 151

TABLE 139 US: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) 151

TABLE 140 US: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION) 152

TABLE 141□US: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)□152

TABLE 142∏US: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏152

TABLE 143 TUS: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) T153

TABLE 144 US: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION) 153

TABLE 145 US: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION) 153

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

```
TABLE 146 US: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION) 154
11.2.2 CANADA 154
11.2.2.1 Growing gene therapy research initiatives to support growth 154
TABLE 147 CANADA: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) 154
TABLE 148 CANADA: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION) 155
TABLE 149 CANADA: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 155
TABLE 150∏CANADA: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏155
TABLE 151 CANADA: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 156
TABLE 152 CANADA: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION) 156
TABLE 153∏CANADA: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION)∏156
TABLE 154∏CANADA: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION)∏157
11.2.3 NORTH AMERICA: RECESSION IMPACT 157
11.3□EUROPE□158
FIGURE 29 EUROPE: GENE THERAPY MARKET SNAPSHOT 159
TABLE 155∏EUROPE: GENE THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION)∏160
TABLE 156⊓EUROPE: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION)□160
TABLE 157∏EUROPE: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION)∏160
TABLE 158 TEUROPE: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 161
TABLE 159 EUROPE: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 161
TABLE 160∏EUROPE: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏161
TABLE 161 EUROPE: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION) 162
TABLE 162 EUROPE: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION) 162
TABLE 163∏EUROPE: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION)∏162
11.3.1 GERMANY 163
11.3.1.1□Growing collaborations in market to boost growth□163
TABLE 164 GERMANY: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) 163
TABLE 165∏GERMANY: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION)∏164
TABLE 166∏GERMANY: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏164
TABLE 167 GERMANY: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 164
TABLE 168∏GERMANY: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏165
TABLE 169∏GERMANY: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION)∏165
TABLE 170∏GERMANY: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION)∏165
TABLE 171∏GERMANY: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION)∏166
11.3.2∏UK∏166
11.3.2.1 Strong government support to drive market growth 166
TABLE 172 UK: CANCER INCIDENCE, BY TYPE, 2020 VS. 2040 166
TABLE 173□UK: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION)□167
TABLE 174∏UK: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION)∏167
TABLE 175□UK: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)□167
```

TABLE 176 UK: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 168

TABLE 177∏UK: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏168

TABLE 178 UK: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION) 168

TABLE 179∏UK: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION)∏169

TABLE 180∏UK: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION)∏169

11.3.3 FRANCE 169

11.3.3.1 ☐Increasing initiatives in genomic research to drive market ☐169

TABLE 181 | FRANCE: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) | 170

Scotts International, EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

```
TABLE 182 FRANCE: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION) 170
TABLE 183 FRANCE: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 170
TABLE 184∏FRANCE: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏171
TABLE 185∏FRANCE: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏171
TABLE 186∏FRANCE: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION)∏171
TABLE 187∏FRANCE: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION)∏172
TABLE 188∏FRANCE: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION)∏172
11.3.4∏ITALY∏172
11.3.4.1 ☐ Initiatives for gene therapy development to drive growth ☐ 172
TABLE 189 | ITALY: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) | 173
TABLE 190∏ITALY: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION)∏173
TABLE 191∏ITALY: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏173
TABLE 192∏ITALY: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏174
TABLE 193⊓ITALY: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏174
TABLE 194 TITALY: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION) 174
TABLE 195⊓ITALY: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION)∏175
TABLE 196⊓ITALY: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION)∏175
11.3.5 SPAIN 175
11.3.5.1 Genomics initiatives and funding to support market growth 175
TABLE 197∏SPAIN: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION)∏176
TABLE 198 SPAIN: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION) 176
TABLE 199 SPAIN: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 176
TABLE 200∏SPAIN: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏177
TABLE 201∏SPAIN: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏177
TABLE 202∏SPAIN: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION)∏177
TABLE 203∏SPAIN: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION)∏178
TABLE 204∏SPAIN: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION)∏178
11.3.6 REST OF EUROPE 178
TABLE 205 REST OF EUROPE: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) 179
TABLE 206 ⊓REST OF EUROPE: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION) □179
TABLE 207 ⊓REST OF EUROPE: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) □179
TABLE 208 | REST OF EUROPE: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) | 180
TABLE 209⊓REST OF EUROPE: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)⊓180
TABLE 210 ⊓REST OF EUROPE: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION) ⊓180
TABLE 211 ⊓REST OF EUROPE: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION) □ 181
TABLE 212 | REST OF EUROPE: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION) | 181
11.3.7⊓EUROPE: RECESSION IMPACT⊓181
11.4□ASIA PACIFIC□182
```

TABLE 213∏ASIA PACIFIC: GENE THERAPY MARKET, BY COUNTRY, 2021-2028 (USD MILLION)∏182

TABLE 214

ASIA PACIFIC: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION)

182

TABLE 215 ASIA PACIFIC: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION) 183

TABLE 216 ASIA PACIFIC: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 183

TABLE 217□ASIA PACIFIC: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)□183

TABLE 218∏ASIA PACIFIC: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏184

TABLE 219∏ASIA PACIFIC: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION)∏184

TABLE 220 ASIA PACIFIC: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION) 184

TABLE 221 ASIA PACIFIC: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION) 185

Scotts International. EU Vat number: PL 6772247784

```
11.4.1 CHINA 185
11.4.1.1 China to c
TABLE 222 CHINA:
TABLE 223 CHINA:
TABLE 224 CHINA:
```

11.4.1.1 China to dominate gene therapy market in APAC during forecast period 185

TABLE 222 CHINA: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) 185

TABLE 223 CHINA: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION) 186

TABLE 224∏CHINA: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏186

TABLE 225 CHINA: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 186

TABLE 226 CHINA: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 187

TABLE 227 CHINA: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION) 187

TABLE 228 CHINA: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION) 187

TABLE 229 CHINA: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION) 188

11.4.2∏JAPAN∏188

11.4.2.1 Increasing initiatives supporting gene therapy adoption to propel market growth 188

TABLE 230 JAPAN: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) 189

TABLE 231∏APAN: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION)∏189

TABLE 232 DAPAN: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 189

TABLE 233∏APAN: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏190

TABLE 234 \square JAPAN: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) \square 190

TABLE 235 DAPAN: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION) 190

TABLE 236 APAN: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION) 191

TABLE 237 \square JAPAN: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION) \square 191

11.4.3 INDIA 191

11.4.3.1 Increasing burden of chronic diseases to drive market growth 191

TABLE 238 | INDIA: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) | 192

TABLE 239 INDIA: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION) 192

TABLE 240 INDIA: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 192

TABLE 241 \square INDIA: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) \square 193

TABLE 242∏INDIA: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION)∏193

TABLE 243 \square INDIA: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION) \square 193

TABLE 244 INDIA: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION) 194

TABLE 245 INDIA: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION) 194

11.4.4□REST OF ASIA PACIFIC□194

TABLE 246 ⊓REST OF ASIA PACIFIC: GENE THERAPY MARKET, BY TYPE, 2021-2028 (USD MILLION) □ 195

TABLE 247 REST OF ASIA PACIFIC: GENE THERAPY MARKET, BY VECTOR, 2021-2028 (USD MILLION) 195

TABLE 248 TREST OF ASIA PACIFIC: GENE THERAPY MARKET FOR VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 195

TABLE 249 ⊓REST OF ASIA PACIFIC: GENE THERAPY MARKET FOR RETROVIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) □ 196

TABLE 250 REST OF ASIA PACIFIC: GENE THERAPY MARKET FOR NON-VIRAL VECTORS, BY TYPE, 2021-2028 (USD MILLION) 196

TABLE 251□REST OF ASIA PACIFIC: GENE THERAPY MARKET, BY THERAPEUTIC AREA, 2021-2028 (USD MILLION)□196

TABLE 252 REST OF ASIA PACIFIC: GENE THERAPY MARKET, BY DELIVERY METHOD, 2021-2028 (USD MILLION) 197

TABLE 253 \square REST OF ASIA PACIFIC: GENE THERAPY MARKET, BY ROUTE OF ADMINISTRATION, 2021-2028 (USD MILLION) \square 197

11.4.5 ASIA PACIFIC: RECESSION IMPACT 197



To place an Order with Scotts International:

 $\hfill \square$ - Complete the relevant blank fields and sign

 $\hfill \square$ - Send as a scanned email to support@scotts-international.com

☐ - Print this form

Gene Therapy Market by Type (Gene silencing, Gene augmentation), Vector (Viral (Retroviral, AAV), Non-viral (Oligonucleotide)), Therapeutic Area (Neurology, Oncology), Delivery Method (In-vivo, Ex-vivo), RoA (Intravenous) & Region - Global Forecast to 2028

Market Report | 2023-10-30 | 276 pages | MarketsandMarkets

elect license	License			Price
	Single User			\$4950.00
	Multi User			\$6650.00
	Corporate License			\$8150.00
	Enterprise Site License			\$10000.00
				VAT
				Total
	vant license option. For any questions please at 23% for Polish based companies, individua			
* VAT will be added	at 23% for Polish based companies, individua	als and EU based con		
	at 23% for Polish based companies, individua			
** VAT will be added	at 23% for Polish based companies, individua	als and EU based con		
** VAT will be added a	at 23% for Polish based companies, individua	als and EU based con		
* VAT will be added a mail* rst Name*	at 23% for Polish based companies, individua	als and EU based con	npanies who are unable to pr	

Scotts International. EU Vat number: PL 6772247784

Zip Code*	Country*	
	Date	2025-05-20
	Signature	