

MarketVue®

# Spinal Cord Injury

June 2021



# MarketVue®: Spinal Cord Injury

## UNDERSTAND THE SPINAL CORD INJURY MARKET

**MarketVue** market landscape reports combine primary (KOL interviews and survey data) and secondary market research to empower strategic decision-making and provide a complete view of the market.

Every **MarketVue** includes a disease overview, epidemiology (US and EU5), current treatment, unmet needs, pipeline and access and reimbursement chapter.

**Methodology:** Research is supported by 6 qualitative interviews with key opinion leaders, a quantitative survey with 26 U.S. physicians and secondary research. Qualitative interview participants included Neurosurgeons from the United States (n=3), Germany (n=2), and United Kingdom (n=1).

**Geographies covered:** United States plus epidemiology for EU5 (France, Germany, Italy, Spain, United Kingdom)

### TOPICS COVERED

**EPIDEMIOLOGY:** Understand prevalence, diagnosed and drug-treated prevalence of the population and key market segments

**CURRENT TREATMENT:** Understand the treatment decision tree and strengths and weaknesses of current on-label and off-label treatment

**UNMET NEEDS:** Identify opportunities to address treatment or disease management gaps

**PIPELINE ANALYSIS:** Compare current and emerging therapy clinical development strategy; their performance on efficacy, safety, and delivery metrics; and their potential to address unmet needs

**VALUE AND ACCESS:** Review the evidence needed to assess and communicate value to key stakeholders (e.g., providers, payers, regulators) and learn what competitors have done or are doing

## Why MarketVue?

- **PMR-Driven** – Insights informed by qualitative interviews and/or quantitative surveys
- **Senior Team** – Experienced team members (10+ years in pharma market research) lead the research
- **Strategic** – Delivered in a concise and strategic report template vetted by pharmaceutical industry professionals
- **Fresh** – New reports or report refreshes delivered in as little as 15 business days



# MarketVue®: Spinal Cord Injury

UNDERSTAND THE SPINAL CORD INJURY MARKET

## COMPANIES MENTIONED

- Kringle Pharma
- Eusol Biotech
- Acorda Therapeutics
- AbbVie
- Pharmazz
- Mitsubishi Tanabe Pharma
- ReNetX Bio
- HistoCell
- Linage Cell Therapeutics
- AlaMab Therapeutics
- K Stem Cell (Biostar Stem Cell Research Institute)
- InVivo Therapeutics

## DRUGS MENTIONED

- Methylprednisolone
- KP-100IT
- ES 135
- Fampridine-SR
- Sovateltide / PMZ-1620 (Tycamzzi)
- Elezanumab
- MT-3921
- AXER-204
- HC016 Neurosave (FAB117-HC)
- OPC1
- ALMB-0166
- AstroStem
- Neuro-Spinal Scaffold

# MarketVue®: Spinal Cord Injury

## Table of Contents

<b>1. DISEASE OVERVIEW</b>	<b>4 - 5</b>
A neurologic condition of loss of function and feeling	4
Overview	4
Table 1.1. American Spinal Cord Injury Association (ASIA) impairment scale	4
Acute and chronic spinal cord injury	5
Figure 1.2. symptoms of spinal cord injury	5
<b>2. EPIDEMIOLOGY &amp; PATIENT POPULATIONS</b>	<b>6</b>
Disease definition	6
Figure 2.1. Prevalent cases of spinal cord injury by region, 2020	6
Table 2.1 Prevalence of spinal cord injury by country, US and EU5, 2020	6
Figure 2.2. Fast facts on spinal cord injury patient population.	6
<b>3. CURRENT TREATMENT</b>	<b>7 - 12</b>
Treatment goals	7
Figure 3.1. Primary goals of treating spinal cord injury	7
Standard of care	8
Figure 3.2. Percentage of patients who undergo surgery	8
Diagnosis and treatment flow	8
Figure 3.3. Diagnosis and treatment flow for spinal cord injury	8
Drug-treatment rates	9
Figure 3.4. Treating physicians and their patient load	9
Is there a role for therapeutic hypothermia in SCI	9
Figure 3.5. Percentage of acute SCI patients receiving therapeutic hypothermia	9
Treating physicians and their patient load	10
Figure 3.6. Professionals involved in spinal cord injury patient care	10
Figure 3.7. Neurologist SCI patient load	10
Must-know treatment dynamics	11
Evolution of treatment	12
Figure 3.8. Potential timeline of spinal cord injury market development	12

# MarketVue®: Spinal Cord Injury

## Table of Contents

<b>4. UNMET NEED</b>	<b>13 - 15</b>
Overview	13
Figure 4.1. Top unmet needs in spinal cord injury	13
Figure 4.2. Physician rankings of unmet needs in spinal cord injury	13
Additional neurosurgeon commentary on unmet needs.	14
Barriers to care	15
Figure 4.3 Percent of neurologists ranking barrier as “impactful” to optimal spinal cord injury care.	15
<b>5. PIPELINE ANALYSIS</b>	<b>16 - 20</b>
Overview	16
Figure 5.1. Percentage of neurologists who rated emerging target or approach as “promising”	16
Figure 5.2. Percentage of neurologists ranking product attribute among top three most important	17
Figure 5.3. Number of emerging therapies addressing unmet needs in SCI	18
Table 5.1. Emerging clinical-stage therapies for SCI	18-19
Figure 5.4. Neurologists’ awareness of emerging spinal cord injury therapies	20
<b>6. VALUE &amp; ACCESS</b>	<b>21 - 22</b>
Overview	21
Figure 6.1. Payer mix for spinal cord injury	21
Healthcare costs and living expenses of SCI patients	21
Figure 6.2. Yearly expenses (health care costs and living expenses)	21
Table 6.1. Yearly expenses (health care costs and living expenses)	21
Table 6.2. Categories of healthcare costs for SCI and areas of potential impact of new therapies	22
<b>7. METHODOLOGY</b>	<b>23 - 24</b>
Primary market research methodology	23
Epidemiology methodology	24

# Meet the REACH Team



**DANIELLE DRAYTON, PhD.**, Dr. Drayton is CEO and Founder of REACH Market Research. She is a seasoned business leader and pharmaceutical market researcher. Prior to founding REACH, Dr. Drayton led the Biopharma Market Assessment business at Decision Resources Group (DRG) comprised of market research, RWD analytics, and consulting business lines. In her 14 years at DRG, she worked with 48 of the top 50 pharmaceutical companies and countless biotech companies that involved exhaustive evaluation of unmet need, target product profiles, commercial potential and new product adoption, and company competitiveness. She also has extensive experience conducting product and market opportunity assessments, portfolio analysis, product and therapeutic area strategy, product valuation and sales forecasting, and pre-launch planning. Dr. Drayton completed a postdoctoral fellowship at the Harvard Medical School, received a Ph.D. in Immunobiology from Yale University, and earned a B.S. in Microbiology and Immunology from the University of Miami (Florida).



**MELISSA CURRAN** is the Director of Product Management at REACH. Melissa has over 10 years of life sciences market research and consulting experience spanning from bespoke strategy consulting to syndicated market research product development and management. Prior to joining REACH, she worked at Decision Resources Group (DRG) for 7 years assisting pharmaceutical and biotechnology commercial teams across the product lifecycle to inform strategic decision making. Melissa is particularly passionate about new product planning and portfolio management, especially in the rare disease space where data can be scarce, and decision-making can be challenging. Specific types of strategic assessments Melissa specializes in include market landscape assessments, commercial opportunity assessment, patient journey mapping, product positioning and TPP optimization, portfolio prioritization, and competitive intelligence. She also has extensive experience working across various market research methodologies including qualitative interviews, quantitative surveys, patient chart audits, real world claims and EHR data, conjoint analysis and secondary research. Melissa received her bachelor's degree in Biology and minor in Business from Providence College.



**MICHAEL HUGHES, MSc, Ph.D.**, Dr. Hughes is the Director of Research at REACH. He has worked in academia, regulatory affairs (NICE) and in RWE and epidemiology consultancies, leading the global epidemiology team at Clarivate (previously Decision Resources Group) for many years. Over that period, he has built numerous new approaches to epidemiological forecasting and imputation, which now form industry best-practice. He has built syndicated and custom epidemiological models and forecasts for many blockbuster drugs across many therapeutic areas, often using a hybrid approach sourcing data from multiple types of dataset and primary market research. He has recently worked on projects in prostate cancer, amyloidosis, anaphylaxis and multi-drug resistant UTIs, among others. He has supported the needs of both big pharma, including Novartis, GSK and Johnson and Johnson, as well as smaller companies and biotechs.

# Meet the REACH Team



**TYLER JAKAB, MPH** is an analyst at REACH Market Research. He is responsible for conducting both primary and secondary market research regarding rare disease therapies to be integrated into market research reports for life science clients. Tyler is a recent graduate of Boston University School of Public Health where he obtained an MPH in Epidemiology of Biostatistics. Prior to joining REACH, he held roles in which he was responsible for health policy analysis, tobacco control research, and health communication. He has extensive experience in data analysis, as well as manuscript and report writing. Tyler also earned a BS in Psychology and Anthropology from the University of North Carolina at Chapel Hill.



**BAYLEY KOOPMAN** is a Research Associate at REACH Market Research. At REACH, Bayley supports both primary and secondary market research through literature reviews and working with qualitative data. He recently graduated from Tufts University with a B.S. in Biology where he studied the interdisciplinary OneHealth approach for public health and the environment. During this time, Bayley founded an early-stage consumer product startup, which became a finalist team in two consecutive Tufts University Entrepreneurship Pitch Competitions. Prior to joining REACH, Bayley also held roles in regulatory affairs in the rare-disease pharmaceutical industry and veterinary practice.



**BRIANA MULLINS** is a current PhD student At NYU School of Medicine studying the immunological progression of disease in psoriatic arthritis. She currently does both laboratory research and computational biology. Previously she earned her undergraduate degree in Biochemistry at New York University (NYU) and worked in the Blaser Lab studying the human microbiome. She also received an MSc. in Population Health at the University College London (UCL) and conducted antibiotic prescription research using the UK THIN Database. Before starting her PhD Briana worked at Decision Resources Group as an Associate Epidemiologist.