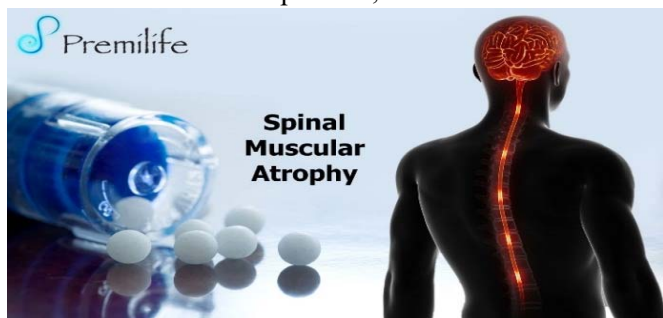


FDA Approves SPINRAZA (Nusinersen) for the Treatment of Spinal Muscular Atrophy in Pediatric and Adult Patients

S PINRAZA is an antisense oligonucleotide designed to treat spinal muscular atrophy (SMA). It is the first drug approved by the U.S. Food and Drug Administration (FDA) for the treatment of SMA in pediatric and adult patients. The efficacy of SPINRAZA was demonstrated in a clinical trial of symptomatic infantile-onset SMA patients, who were below or



equivalent to 7 months of age at the time of first dose. The

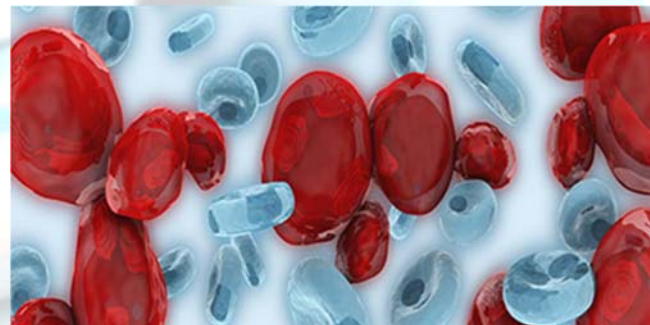
Source: <http://media.biogen.com/press-release/neurodegenerative-diseases/us-fda-approves-biogens-spinraza-nusinersen-first-treatment>

clinical trial was supported by open-label uncontrolled trials conducted in symptomatic SMA patients, of the age group 30 days to 15 years at the time of first dose, and in presymptomatic patients, of the age group 8 days to 42 days at the time of first dose. Some patients were able to sit unassisted, stand, or walk when they would otherwise be unexpected to do so, maintained these milestones at ages when they would be expected to be lost, and survived to unexpected ages.

The most common adverse reactions that occurred in SPINRAZA-treated patients were lower respiratory infection, upper respiratory infection and constipation. Serious adverse reactions of atelectasis were more frequent in SPINRAZA-treated patients than in control patients. Coagulation abnormalities, thrombocytopenia, and renal toxicity have been observed after administration of these antisense oligonucleotides.

CALR: the new biomarker for myeloproliferative neoplasm (MPN) research

P olycythemia vera, essential thrombocythemia and primary myelofibrosis, the three major forms of MPN, are most often associated with Janus kinase 2 (JAK2) mutations. However, a large subset of MPN are JAK2 V617F-negative. Two large scale studies on MPN showed that many of the JAK2 V617F-negative MPNs were positive for both somatic Type I and Type 2 mutations in calreticulin (CALR). CALR is a multifunctional protein that binds Ca^{2+} .



Source: <http://www.hematology.org/TheHematologist/Years-Best/3546.aspx>

Postpartum Depression Not Shown to Impact Children

P ostpartum depression (PPD) is a serious medical issue that can affect any woman after giving birth.



Statistics show that on average, 15% of women who give birth each year have postpartum depression symptoms.

Though some research suggested a link between a mother's depression and behavioral problems in their children, new research shows no significant negative impact of mother's PPD on her children.

The most recent research came from data collected in the Norwegian Mother and Child Cohort study. The data showed no significant adverse effects on young children of mothers who reported PPD. While children were not negatively impacted by the PPD of their mums during the first three years of life, the risk of developmental or emotional issues in children of mothers with PPD increased as those children grew older. Dr. Line C. Gjerde, of the Department of Mental Disorders,

Norwegian Institute of Public Health and lead author of the study, stated in a press release "The effect of maternal depression on children seemed to increase with the child's age. We found that children of mothers who were depressed before and after birth had more mental health

problems because they share risk genes with their mother; however, spending time with a depressed mother in the preschool years can be harmful to the child's mental health."

Source: <https://www.labroots.com>

WHO Alerts the Globe about the 12 Deadliest Microbes

Years of overuse, misuse and non-compliance has created a serious problem whereby humanity can no longer rely on the old standards that have been used to effectively treat bacterial infections for decades. The World Health Organization has now produced a list of twelve microbes that are seen as major priorities for antibiotic development.



Source: <https://www.labroots.com>

In this group are *Acinetobacter*, *Pseudomonas* and the family of *Enterobacteriaceae* which includes *Klebsiella*, *Proteus* and the commonly known *E. coli*. The microbes affect people already suffering from infections found in hospital and clinic. These bacteria often cause pneumonia and infections of the blood. Bacteria that have become resistant to virtually all antibiotic treatments are in this group. Carbapenems are seen as a last-resort treatment for various bacterial infections that are impervious to typical treatments, and some bacterial strains have gained resistance to those drugs (usually by gaining a piece of genetic material). The next categories include bacteria that are still very dangerous, resulting in illnesses like gonorrhoea and food-borne illness.

"New antibiotics targeting this priority list of pathogens will help to reduce deaths due to resistant infections around the world," reported by one of the researchers Professor Evelina Tacconelli.

False Claims about a Cure for Autism

Autism spectrum disorder (ASD) and autism are both names for a group of symptoms, syndromes and disorders of the brain. Autism looks different in almost every person that has it. As it can manifest in so many different ways, that is why it is referred to as a spectrum. There is a wide range of disorders involved and each patient is unique in how they appear.

While having a child diagnosed with autism itself is incredibly stressful, the fact that there is no known cause or cure adds even more stress. However, that does not stop some organizations such as the Genesis II Church from offering up false hope. A so-called treatment called "Miracle Mineral Solution



Do you know??

Neuroscience aims to understand how a single organ can control the entire body, from immune response to heart rate, from movement to learning and feeling. Neuroscientists work within a much wider scope than ever before, studying the cellular, functional, evolutionary, computational, molecular, cellular and medical aspects of the nervous system.

(MMS)" that cures autism has been making the rounds online for years now.

Experts say that the mixture is actually a form of industrial bleach and can cause serious health problems when ingested. Ingesting the recommended dose of this solution may cause serious vomiting, diarrhea, dehydration and other dangerous health problems. Interestingly, the Genesis II Church claims these side effects to be a sign that the cure is working. Health officials are urging everyone who has used MMS to contact a healthcare professional immediately.

Source: <https://www.labroots.com>