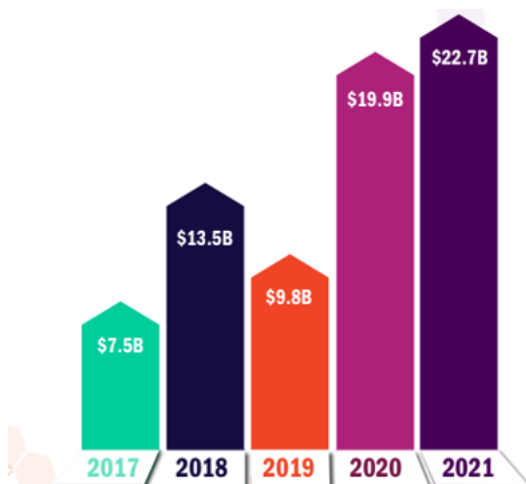




## Are Traditional Medicines Relevant Today?

The disease landscape has shifted majorly over the past few decades. Drugs have exterminated most of the infectious life-threatening diseases of the past. However, today our lifestyle choices have given rise to several non-communicable diseases (NCDs). Diabetes, cardiovascular disease, musculoskeletal disease, and cancer are all examples of common NCDs prevalent today. According to the World Health Organization, NCDs contributed to 41 million deaths worldwide in 2021. Out of these, 15 million people were between the age group of 30 to 69 years. 85% of such "premature" deaths occur in low- and middle-income countries<sup>[1]</sup>. Conventional drugs may come in handy to ease the symptoms of NCDs for some time, but they do not guarantee a definite chance of cure. Drugs treat the symptoms of the disease, however, not the cause. This increases the disease burden among patients, followed by extensive healthcare costs. There is an urgent need for modification of treatment approaches for the management of diseases prevalent today.



Investment trends in regenerative medicines and Regenerative medicine clinical trials in prevalent and rare diseases

Regenerative medicine, an emerging therapeutic field, focuses on methods to regrow, regenerate, or repair the abnormalities present in a diseased body. It employs cells, materials, or stimulations to heal the damaged body part. Currently, regenerative medicine is at the frontier of applying years of research into therapeutic applications. The investment trends in regenerative medicines have increased dramatically since 2017. The Business Communications Company (BCC) Research stated that the global stem cell and regenerative medicines market is projected to reach \$55.0 billion by 2024<sup>[2]</sup>. Regenerative medicine developers successfully raised a record investment of \$22.7B in 2021. Out of which, \$10.1B is dedicated to the cell therapy domain<sup>[3]</sup>. McKinsey Global Institute reported that such innovative therapies can reduce the global disease burden in the coming decades<sup>[4]</sup>.

Key companies like Sanofi, Pfizer, Inc., Takeda Pharmaceutical Company, Bristol-Myers Squibb, Novartis, Gilead, Merck, Roche, etc invest heavily in the development of regenerative therapies due to their immense therapeutic potential. Moreover, collaborative product development strategies have become a trend in the regenerative sector. The key players are focused on expanding their spectrum of research by acquiring smaller R&D companies. The market has witnessed a significant number of mergers & acquisitions in recent years. For instance, ProKidney, a cell therapy company, is going public in a SPAC (Special Purpose Acquisition Company) merger that infuses the biotech with \$825 million for its autologous cell therapy for chronic kidney disease<sup>[5]</sup>. In 2021, Swiss pharma giant Novartis acquired all the outstanding share capital of the UK-based ocular gene therapy company Gyroscope Therapeutics<sup>[6]</sup>. The arrival of well-established pharmaceutical organizations is expected to increase M&A (Mergers and Acquisitions) activities, which will boost growth in the regenerative medicine market.

### References:

1. World Health Organization (WHO) Noncommunicable diseases Factsheet, 2021
2. BCC Publishing. (2019). Stem Cell & Regenerative Therapy Market Size, Trend & Research Report.
3. Alliance for Regenerative Medicines (ARM) Report, 2021
4. McKinsey Report On Biological Revolution- May, 2020
5. Vinluan, F. (2022, January 19). Regenerative med biotech ProKidney inks merger to get \$825M for CKD cell therapy. MedCity News
6. The Pharma Letter. (2021).