1. DIGITAL THERAPEUTICS
- Digital therapeutics is a new frontier in the management of cardiometabolic diseases.
- Easy-to-use mobile apps to maintain treatment adherence, providing behavioral therapy, and remote monitoring are set to change the treatment paradigms, thus providing long-term health benefits.
- With an aim of reducing the cost of treatment and improving quality of life, digital therapeutic companies are already developing unique technology-enabled and easily accessible solutions.

2. ARTIFICIAL INTELLIGENCE
- An overall rise in digital therapeutics has lead to the emergence of AI-based tools for accurate disease prediction, diagnosis, and management.
- A shift toward preventative care is imperative with the use of AI-based applications as diagnostic tools for prediction of heart failure or diabetic episodes.
- Moreover, AI and machine learning algorithms are also expected to resolve issues pertaining to non-availability of patient data by means of effective data storage in Electronic Health Records.

3. REGENERATIVE MEDICINE
- Due to life-long treatment associated with cardiometabolic diseases, regenerative medicine is considered as the next go-to option with one-time therapies.
- Due to an overall 6.6% growth and an anticipated revenue of $15.8 billion in 2022, regenerative medicine is expected to be a clinical reality in cardiometabolic treatment.
- Research across mesenchymal and bone marrow stem cells to treat heart failure is showing strong promise in the development of stem cell therapies.
- Research across obesity segments has established that targeting the protein PPAR (PPARG) could break down fat stored in adipose tissue, which binds to the promoter for genes to produce proteins involved in fat metabolism can be used for regenerative medicine in future.

4. BIOMARKER-BASED TECHNOLOGIES
- Use of proteomic, genomic, and metabolic biomarkers is being studied to aid in risk assessment, diagnosis, prognosis, and clinical management of cardiometabolic disorders.
- Biomarkers are expected to be promising tools for developing companion diagnostics, which support the patient-centric treatment modalities.
- Recent advancements in heart failure studies have established the clinical significance of B-type natriuretic peptide (BNP) and its biologically inert, amino-terminal pro-peptide counterpart (NT-proBNP) in heart failure detection and management.
- Several metabolic marker panels comprising mannose, 2-hydroxybutyrate, glucoseamine, and HbA1C, which could support early diagnosis can be developed.

5. DRUG DELIVERY TECHNOLOGIES
- Alongside traditional oral drug delivery techniques, there is an emergence of injectable and inhalable techniques for treatment especially in case of insulin drug delivery.
- Subcutaneous injectable insulin analogs have been showing strong efficacy recently.
- A focus on nanoparticle drug delivery using transdermal patches or inhalable as well as subcutaneous injectable are expected to fair well in the future.

6. OTHER MEASURES
- Going beyond the pill by benefiting patients with specific guidelines for self-management, thus providing “treatment-as-a-service”.
- Diabetes self-management and quality-of-life modification guidelines by ADA, ACC, National Standards for Diabetes Self-management, Education and Support are among such initiatives.
- Using automated processes with IT solutions from companies such as Accenture helps in maintenance of Electronic Health Records (EHRs) and patient data registries.
- These would, in turn, enable an effective clinical workflow through the entire care paradigm.

THE FUTURE OF CARDIOMETABOLIC HEALTH MANAGEMENT

CREATED BY CARDIOMETABOLIC HEALTH CONGRESS