The Company
CureDM is developing new, safe, effective therapies for diabetes mellitus (DM). The compounds under development have the potential to generate new insulin-producing cells within the pancreas; thus reversing the diabetic state and reducing or eliminating the need for insulin injections.

The Need
Twenty-one million people in the United States have diabetes. It is a leading cause of death and can lead to complications including heart disease, kidney failure, blindness, neuropathy, and amputations. Patients with diabetes either cannot produce enough insulin, cannot effectively use the insulin they do produce, or both. Current treatments help to manage the disease but do not treat the underlying disease mechanism.

The CureDM Technology
Insulin-producing cells are contained within islets, which reside in the pancreas. CureDM has identified a human peptide sequence, Human ProIslet Peptide (HIP), that stimulates the differentiation of certain cells within the pancreas into new islets. Successful development of HIP would lead to a therapy that repopulates the pancreas with new islets, providing a unique approach to the treatment of type 1 diabetes, Latent Autoimmune Diabetes in Adults (LADA), type 2 diabetes, and prediabetes.

Planned Indications
For type 1 diabetes, HIP therapy would have to be used in conjunction with an immune tolerance agent, to protect the new islets from autoimmune attack. Several candidates are in development for this purpose. In type 2 diabetes, HIP could be used synergistically with existing treatments, magnifying the effects of these therapies. In prediabetes, HIP could be used to reverse the progression of prediabetes by alleviating stress on existing islets.

The Market
Diabetes is a fast-growing market, with the number of patients expected to grow to 50 million by 2016. It is also very costly; in 2002, the U.S. spent approximately $132 billion treating diabetes and associated complications. Consequently, a treatment such as HIP, with the potential to considerably reduce costs as well as produce significant patient benefit, is expected to be well received. Virtually all type 1 patients will be considered candidates for HIP treatment. Adoption of HIP in the type 2 market will be among patients on both injectable and oral diabetic therapies.

Intellectual Property
CureDM has developed a patent portfolio that includes the composition of Human ProIslet Peptide, stabilizing modifications to its native structure, and methods of using an islet neogenesis agent for reversal of diabetes and related metabolic disorders. In-licensing of methods for encapsulation are underway for development of follow-on products for diabetes and metabolism.

Recent Major Research Milestones Achieved
- Proof of concept bioactivity in vitro at University of Pennsylvania Human Islet Laboratory.
- Randomized, placebo-controlled, STZ diabetic mouse model shows statistically significant reduction of glucose levels and insulin requirement among HIP treated mice (in one group, the need for insulin treatment was eliminated) and new insulin-positive islets shown by histological quantitative image analysis in post-mortem pancreata of HIP-treated mice.
- Pharmacokinetics completed and new stabilized formulations designed and synthesized for improved efficacy in vivo.
- Investigational New Drug (IND) application in development.

Commercialization
License discussions are currently being invited and some are already underway with major pharmaceutical partners for the clinical development and eventual commercialization of HIP and follow-on products for diabetes. In the meantime, a Series C opportunity for investment in CureDM toward successful IND is now offered for selected investment partners.