

Nucleic Acid Therapy: from humble beginnings a dynamic technology

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The term “nucleic acid therapy” encompasses a wide range of technologies for the treatment of a range of plant and animal ailments. As the name implies, it makes use of nucleic acid (either DNA or RNA) as a therapeutic agent. There are six branches namely: antisense, ribozymes, RNA/DNA decoys, triplex forming oligonucleotides (TFO), RNA interference (RNAi) and most recently aptamers. These therapies work by modulating gene expression of either endogenous or invading genes. This review will provide a brief history of each of the technologies as well as an insight into the potential way forward.