Several antisense oligonucleotide drugs have been approved by the regulatory agencies (FDA, EMEA) in the past two decades. Oligonucleotide-based therapeutics generally are a hot topic in research and development as they open the door for the treatment of a broad range of diseases that cannot be treated differently.

Two pioneers in the industry, Microsynth AG and Bachem AG, with long-term experience in catering to the pharmaceutical industry as well as research organizations, offer the full portfolio of services and products needed to successfully develop, launch and market oligonucleotide APIs.

Microsynth AG, well known for 30 years of experience in the synthesis of modified oligonucleotides, is handling the early phase research and development projects, enabling clients to benefit from:

- a high level of expertise and experience in the synthesis of oligonucleotides (ASOs, gapmers, siRNAs) for drug discovery
- the best approach for the chemical synthesis using a broad portfolio of modifications (e.g. LNA, MOE)
- the fastest supply available, delivering products at exceptional speed
- sustainable and cost-efficient setup, from infrastructure to processes and systems
- fast, flexible and reliable service from quote to delivery

Bachem AG, founded in 1971, is an expert in all aspects of GMP manufacturing of APIs and takes over customer projects, once GMP released material is required for clinical studies. Clients will be taken care of from early clinical phases to phase III, until launch and market supply:

- starting with tech-transfer, highly efficient due to the established partnership
- assuring development of efficient, scalable processes, that are fit for GMP-manufacturing
- ensuring purification and QC analysis by state of the art technologies
- providing regulatory support throughout all steps of the filing, from IND to NDA
- delivering GMP compliant APIs with a “best in class” mindset

Benefits while working with us:

**We guarantee**

- coverage of the entire product development process, from R&D to commercialization
- fast and agile production in the early stages by Microsynth
- seamless transition of your project to Bachem
- priority access to GMP-manufacturing capabilities and resources
- no headaches for your CMC manager by working with the experts in the field
- best practice GMP standards and sound knowledge in API synthesis at all scales
Service offerings for antisense oligos, siRNAs and aptamers

Research & development
• fast turnaround times
• flexible synthesis of a broad portfolio of therapeutic oligonucleotide drug candidates
• hands-on know-how in challenging and custom modifications
• instant synthesis of ASO libraries for screening (ug-mg)

Pre-clinical support and supply
• Development of synthetic routes for the supply of mg to gram quantities
• High level of documentation available and traceability guaranteed
• Established processes for project transfer to Bachem with defined tech packages and procedures

Clinical & commercial manufacturing (GMP)
• GMP manufacture of antisense oligos, siRNAs, aptamers up to kg quantities
• Purification by prep-HPLC or ion-exchange (IE) chromatography
• Analytical method development, validation and QC-release
• Regulatory support from IND to NDA

Microsynth and Bachem are committed partners for innovative biotechs and pharmaceutical companies. We strive to support the successful development of oligonucleotides as therapeutic drugs with expertise, a strong focus on quality and a mindset to speed up the development of new APIs by an agile way of working and true partnership.