FEBRUARY 2022

Expanded fill-finish capacity to accelerate your preclinical oligonucleotide program

A newsletter from Nitto Avecia and Nitto Avecia Pharma Services

Nitto Avecia Pharma Services is excited to announce its expanded fill-finish capacity to bring our clients one step closer to meeting all of your oligonucleotide preclinical needs! In collaboration with Nitto Avecia's OliGrow™, a small-scale manufacturing unit at our Cincinnati facility, this extended service enables preclinical manufacturing followed by fill-finish, up to 1,000 vials.

Comprehensive solution

We offer custom oligonucleotide manufacturing for non-cGMP applications. All oligonucleotides are synthesized, purified, and desalted using processes pre-tailored for your preclinical manufacturing needs. Products are analyzed in-house using phase-appropriate analytical methods and our team can handle a wide array of chemistries and sequence types.

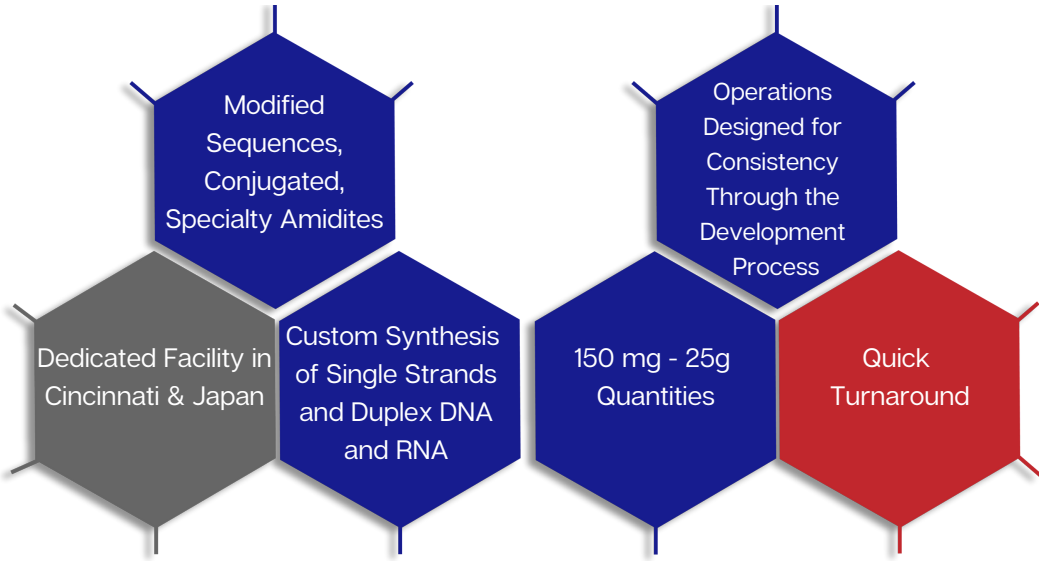
Complex chemistry capabilities

Our scientists have the experience to welcome all types of standard and novel oligonucleotide chemistries. We can synthesize all types of conjugation and pegylation reactions incluing the manufacturing of RNA longmer sequences.

Small Scale nonGMP Services

Reduce risk, right from the start

Our OliGrow service delivers preclinical material with Nitto Avecia's built-in quality and expertise. We can manufacture 150 mg to 20 grams of preclinical non-GMP material and then transfer that knowledge internally to manufacture hundreds of kilograms of final GMP product. Having that initial compound knowledge with Nitto Avecia can minimize development time and costly tech transfers as the project progress into large-scale manufacturing.



Providing a human touch

Your oligonucleotide is not just another sequence entered into a web portal. Our experienced technical team will evaluate the appropriate analytical methods and processes for your sequence's chemistry to support successful preclinical manufacturing. A Project Manager is also available to answer questions and keep you updated on the status of your project.

Preclinical fill and finish lab capabilities

Upon completion of your preclinical API manufacturing, Nitto Avecia Pharma Services can then offer expanded fill-finish services supporting up to 1,000 vials. This service work is performed in an ISO 7 (ISO 5 upon request) environment and governed by SOPs. We support reference standards, animal study samples for both non-GLP and GLP, and non-GMP stability studies. We provide flexibility to meet customized documentation requirements and final drug product release testing that can meet industry standards.

An experienced team of oligonucleotide experts

Nitto Avecia and Nitto Avecia Pharma Services are led by professionals with deep expertise gained through years of experience that help to lead the industry in specialized knowledge unique to oligonucleotide development and manufacturing. All share a common commitment to the success of our clients' programs. For more information on any of the OliGrow or fill-finish opportunities, please email Matt Gross, Business Development/Project Manager at Nitto Avecia at **oligrow@avecia.com** or Kyle Chisholm, Senior Director of Business Development at Nitto Avecia Pharma Services at **kyle.chisholm@nitto.com**.