



Micronization XPRESS

NAT's 7-day Accelerated Development Program to Rapidly Micronize your API for Enhanced Solubility and Bioavailability

Significant number of drug development candidates display low solubility and bioavailability and thus present significant challenges in achieving the desired therapeutic effects. Micronization allows for a dramatic increase of the API's surface area and may lead to substantial improvements in pharmacological properties.

The streamlined Micronization XPRESS program offered by NAT aims to quickly develop testing sample formulations for subsequent validation in the clients' in vivo studies using small (1-5 g) quantities of the API (that is often in short supply at the early stages of the preclinical development). Based on our extensive experience in the wet and dry milling, we have developed a panel of highly effective approaches leading to a quick optimization of the milling conditions capable of achieving low-micron to sub-micron range particles.

We support the Micronization XPRESS program with a short-term stability studies for confirming the integrity of the API using HPLC or other analytical methods as provided by the client, or additionally we can develop these methods.

Following completion of the proof-of-principle Micronization XPRESS study, NAT offers a Micronization D-SPRINT program that will build on the success of the initial finding and further optimize lead formulations, provide thorough characterization of the physico-chemical properties, perform in-depth stability studies, develop lyophilization conditions for liquid formulations, and lay the foundation for scale-up and pilot production.

Critical features of our pioneering Micronization XPRESS program:

- Unparalleled speed with a 7-day completion time
- Delivery of a ready-for-testing formulation for in vivo studies
- Small amount of the API required for the full study
- API stability control