

Topics: Formulation of NCEs PLGA micro particle by spray drying

Duration: 6 months

Start date: February / March 2022

Position type: Internship (for a Master student)

Description: The project aims at formulating NCEs PLGA microparticles for extended drug release by spray drying. The goal is to establish a spray drying process and determine composition providing extended-release with NCE PLGA microparticle over at least one month with good re-constitution and injectability. The project involves the following tasks:

- Evaluate suitability and optimize the spray-drying process for poorly water-soluble drugs molecularly dispersed in the polyester matrix or for crystalline drugs suspended in the polyester matrix.
- Perform solid-state and material science characterization (SEM, XRPD, PSD, DSC (T_g, M_p), LOD, and DVS) of spray-dried microparticles and determine their suspendability of spray-dried in a suitable vehicle
- Evaluate in-vitro drug release of spray-dried microparticles under sink conditions

Please send your application to marcel.schneider@novartis.com.