

**LyoTech AB**

**Pharma Projects**



LyoTech AB

# Company presentation for Pharma projects

Pharma expert consultant: Åsa Bergenholtz, Pharm. Dr.

We offer :

- ✓ Experienced project leadership
- ✓ Lyo-product development by “Best Practice” rationale
- ✓ Advanced troubleshooting
- ✓ Optimizing activity and stability
- ✓ Optimizing the formulation and lyo-cycle
- ✓ Quality by Design – experimental design  
...and much more

Visit: [www.lyotech.se](http://www.lyotech.se)



We are specialized on formulation, freeze-drying and product stability aspects!





- ✓ Selection of ingredients
- ✓ Function of ingredients
- ✓ Solid content
- ✓ Solvent and solute behavior
- ✓ Critical temperatures, and the use of them
- ✓ Impact of selection of ingredients on product characteristics
- ✓ Impact of lyo-cycle and process economy



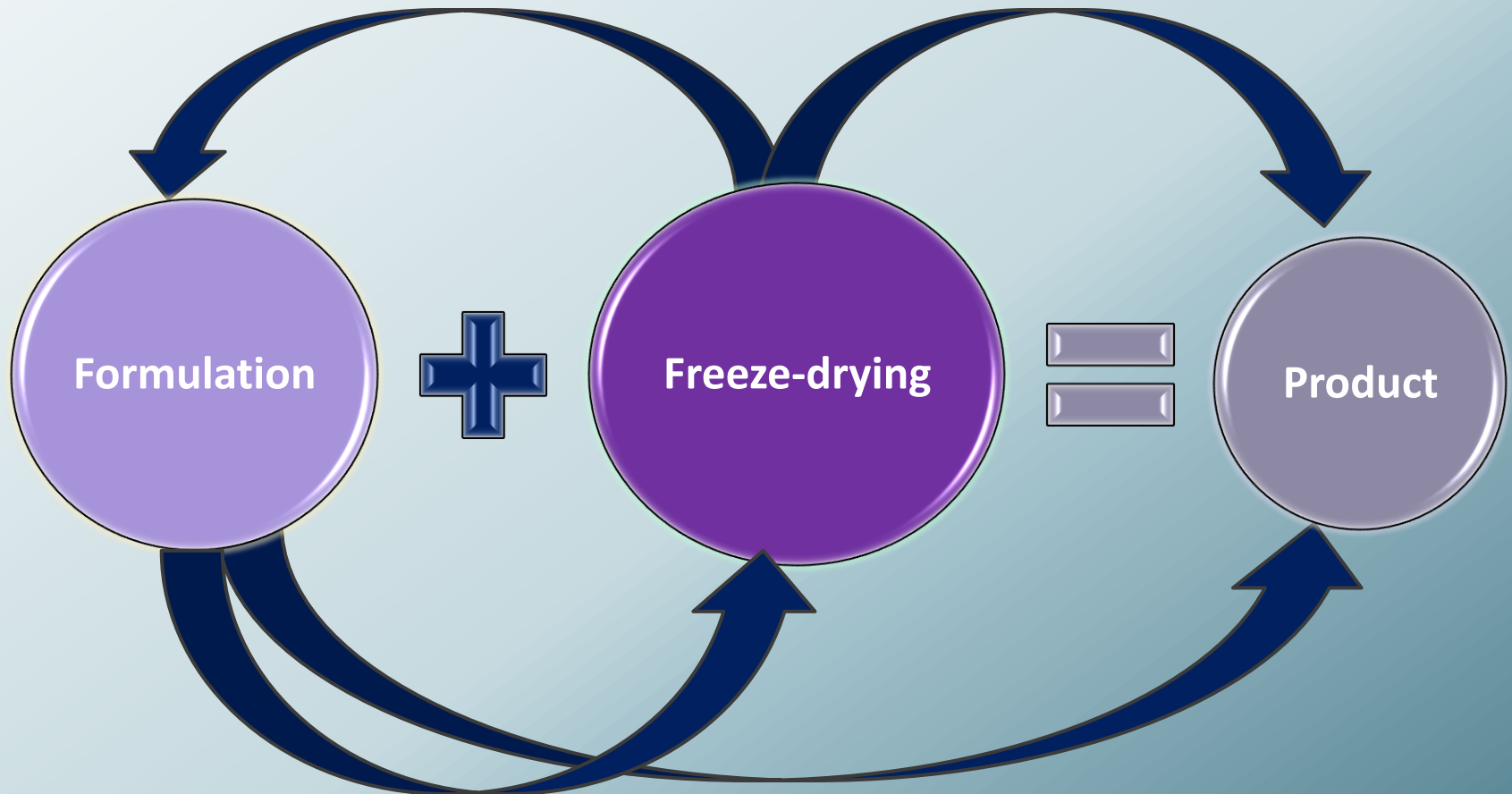
- ✓ Optimizing lyo-cycle, better economy!
- ✓ PAT (process analytical technology)
- ✓ Reach right moisture level
- ✓ Form right product characteristics
- ✓ Dry to maintain high quality
- ✓ Control according to selected critical temperatures ( $T_{coll}$  or  $T_g$ )
- ✓ QbD (Quality by design) approach
- ✓ Robust and optimized



- ✓ High stability and right moisture level
- ✓ High activity
- ✓ Pre-determined technical quality
- ✓ Characterization of the dry product
  - ✓ Amorphous or crystalline?
  - ✓ Moisture levels?
  - ✓ Stability (ICH guidelines)
  - ✓ Troubleshooting



# What affects what? and how? - **We know!**





# Lyotech AB



Lyotech is developed by knowledge, not trial and error!

<http://www.lyotech.se/>

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All quotations are free of charge!