

Rapid Pharma Development GmbH

**CMC Outsourcing for Early
Development – How to
rapidly get into first in man**



The Challenge



What is your Goal? What is your path?

Define your goal: Target Product Profile

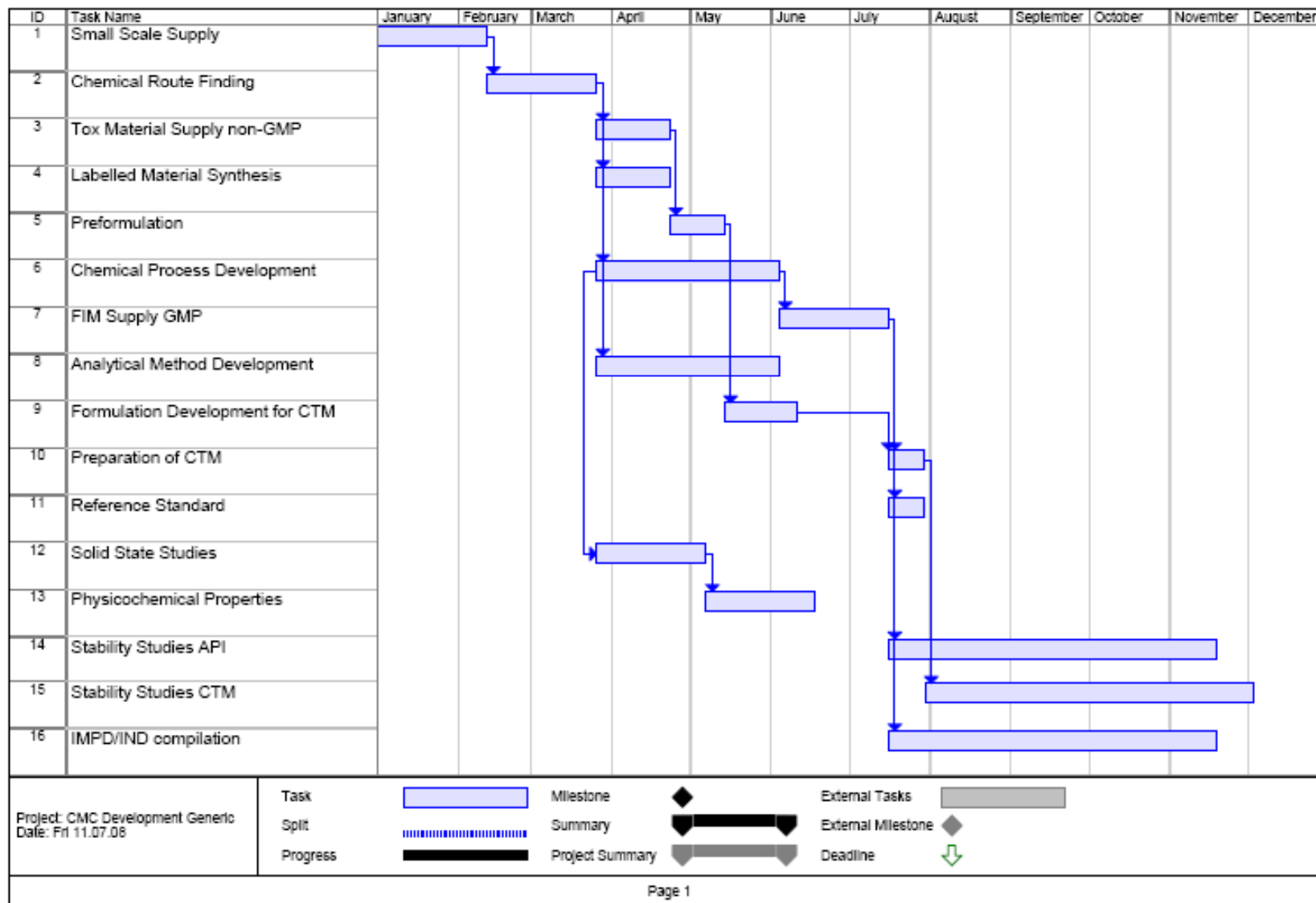
- Daily dosage
- Cost of Goods
- Administration Route



Define your path: Project Plan

- Work backwards: NDA submission, Clinical Studies, IND, Tox Studies, ..
- Material needs for preclinical and clinical studies

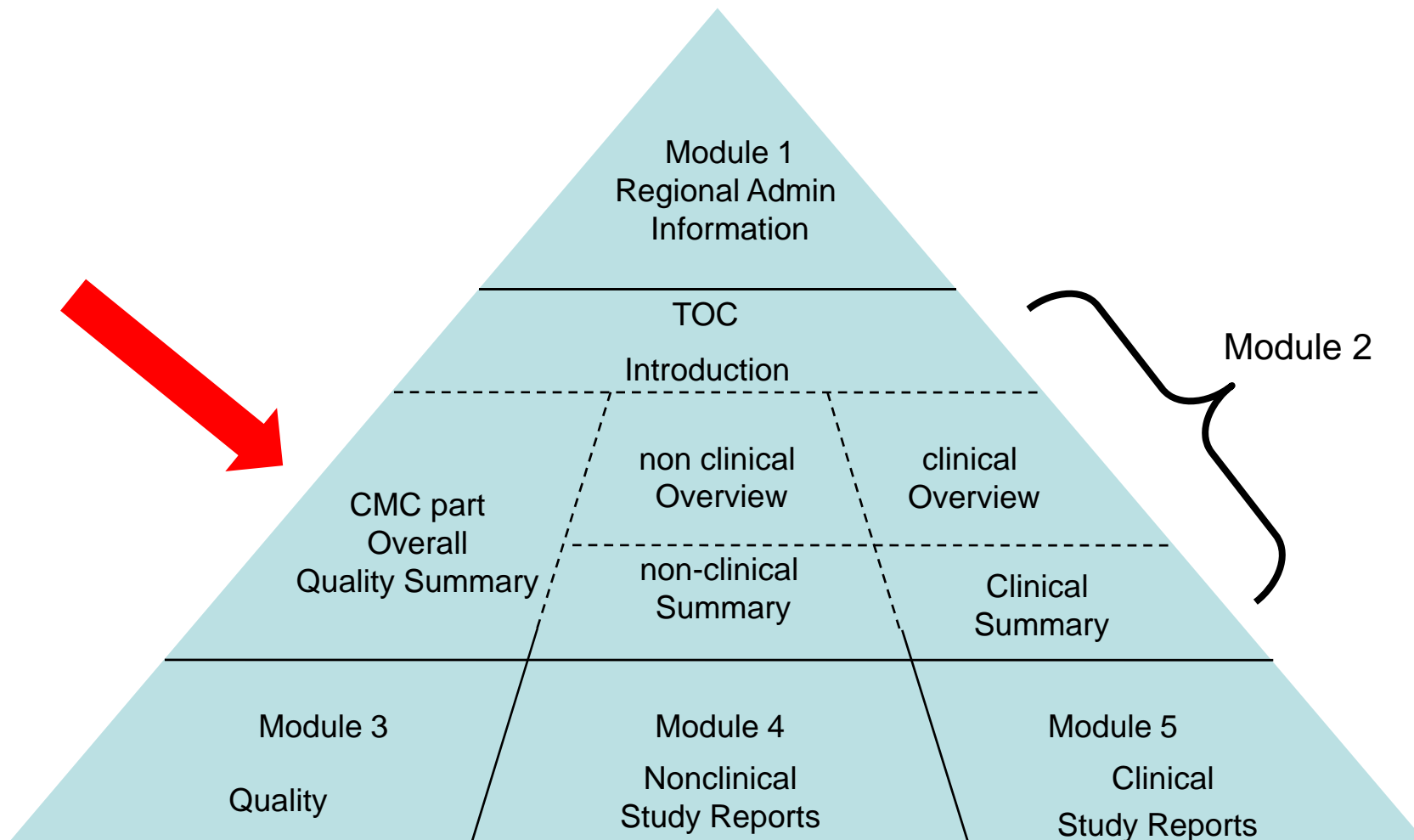
Project Plan



Drug Development Summit



CTD: Common Technical Document



Quality Statement



drugs should be safe, pure,
effective and of consistent quality to
ensure that they are fit to be used
for their intended purpose

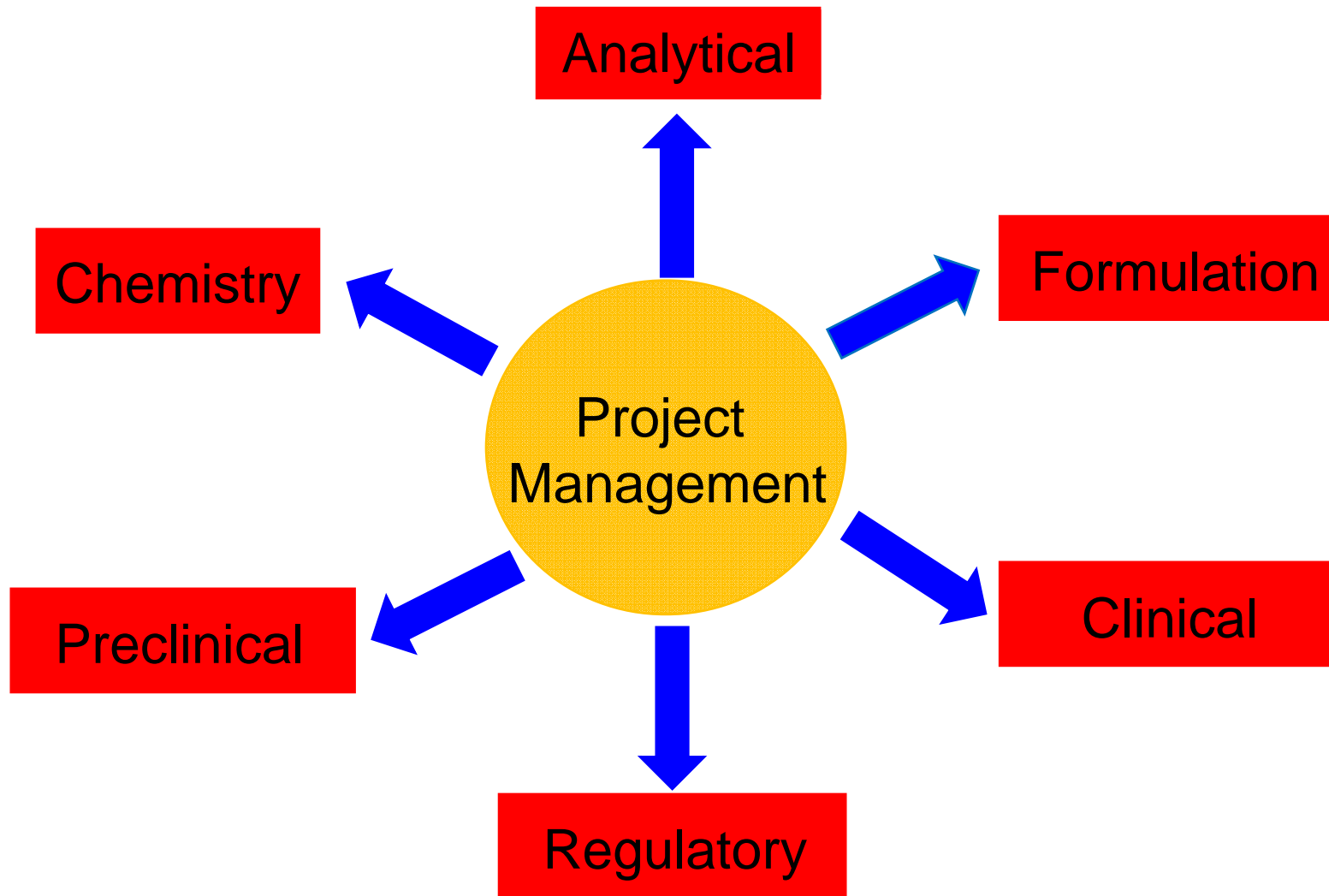
Quality Concerns that cause a Clinical Hold are either

1. identification of safety concern or
2. insufficient data to evaluate safety

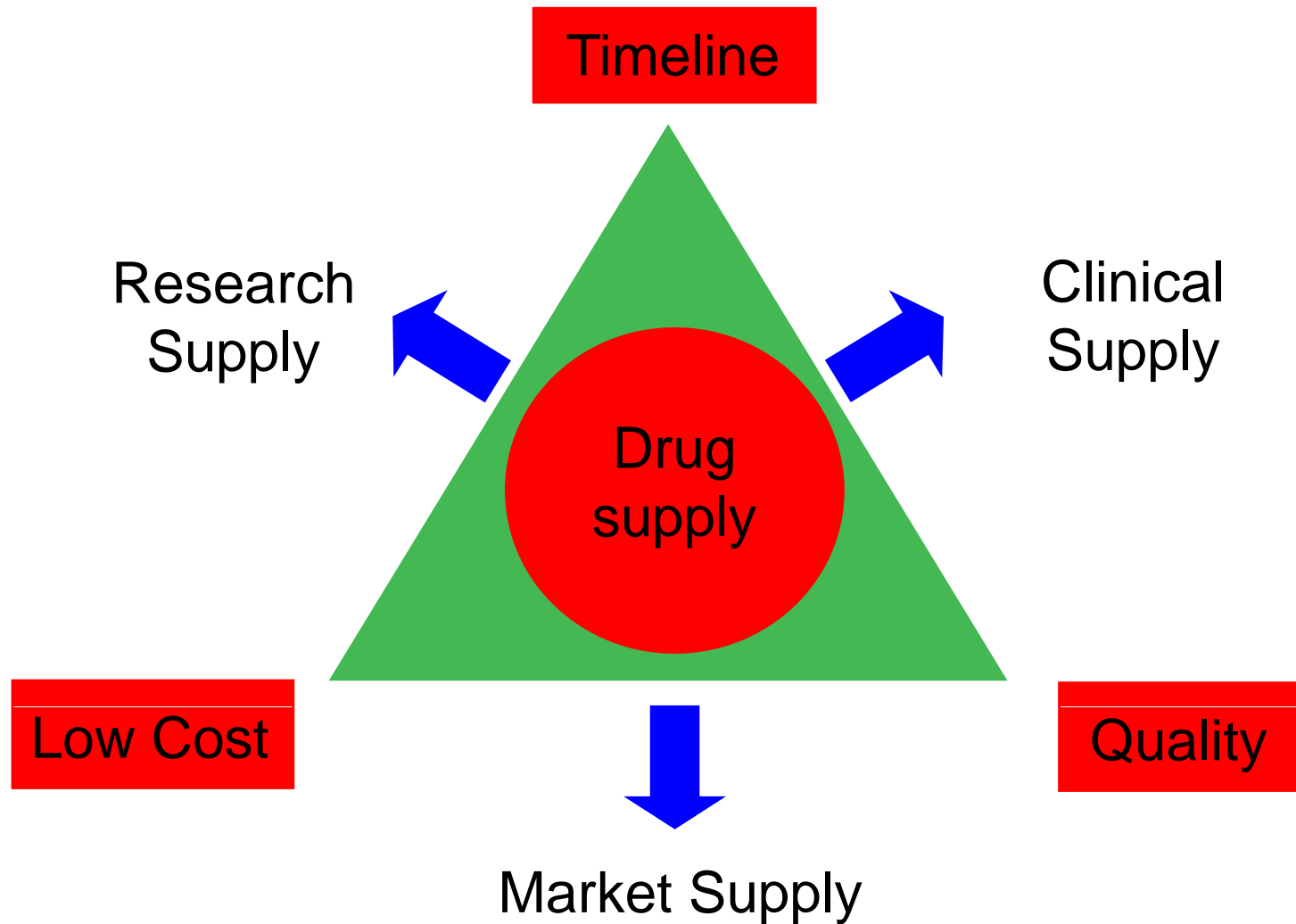
e.g.

- toxic impurities (solvents, genotoxics)
- instability during the course of the clinical trial
- insufficient analytical effort

Outsourcing Partners



The QCT Triangle



Chemistry: API ,drug substance



- Time is more important than cost
- Quality: GMP ICH Q7 chapter 19
Purity should be reasonable (not too high)
Avoid toxic solvents
Avoid genotoxics generation
Avoid chromatography
- Quantities
5-10 kg FIM and Tox studies

Chemistry Partner



- Choose a reliable partner - not a cheap chemical supplier
- Audit or inspect your Partner - It is a requirement!
- Have a quality Agreement in Place
- Specification vs Report Result
- Documentation
 - Batch Record and CoA
 - Development and Campaign Report
 - Raw Material data

Formulation Tasks



- Target Product Profile?
- Preformulation: SSS
 - Substance: which Salt form, Polymorphism?
 - Solubility: Is the desired solubility achieved
 - Stability: Do you have enough Stability and enough data
- Formulation
 - first time right –bioavailability
 - Supportive Stability Data - accelerated

Formulation Partners



- Do Salt Selection and Polymorph Work prior to Formulation work
- Choose a flexible yet knowledgeable Partner to develop preformulation and formulation
- For the production choose a GMP partner

Analytical Tasks



- Reference Standard
- Method Development
- Validation of Stability indicating Methods
- Validation Drug Product Methods for Release and Stability indicating
- Control of your API and Formulation Partners

Analytical Partner



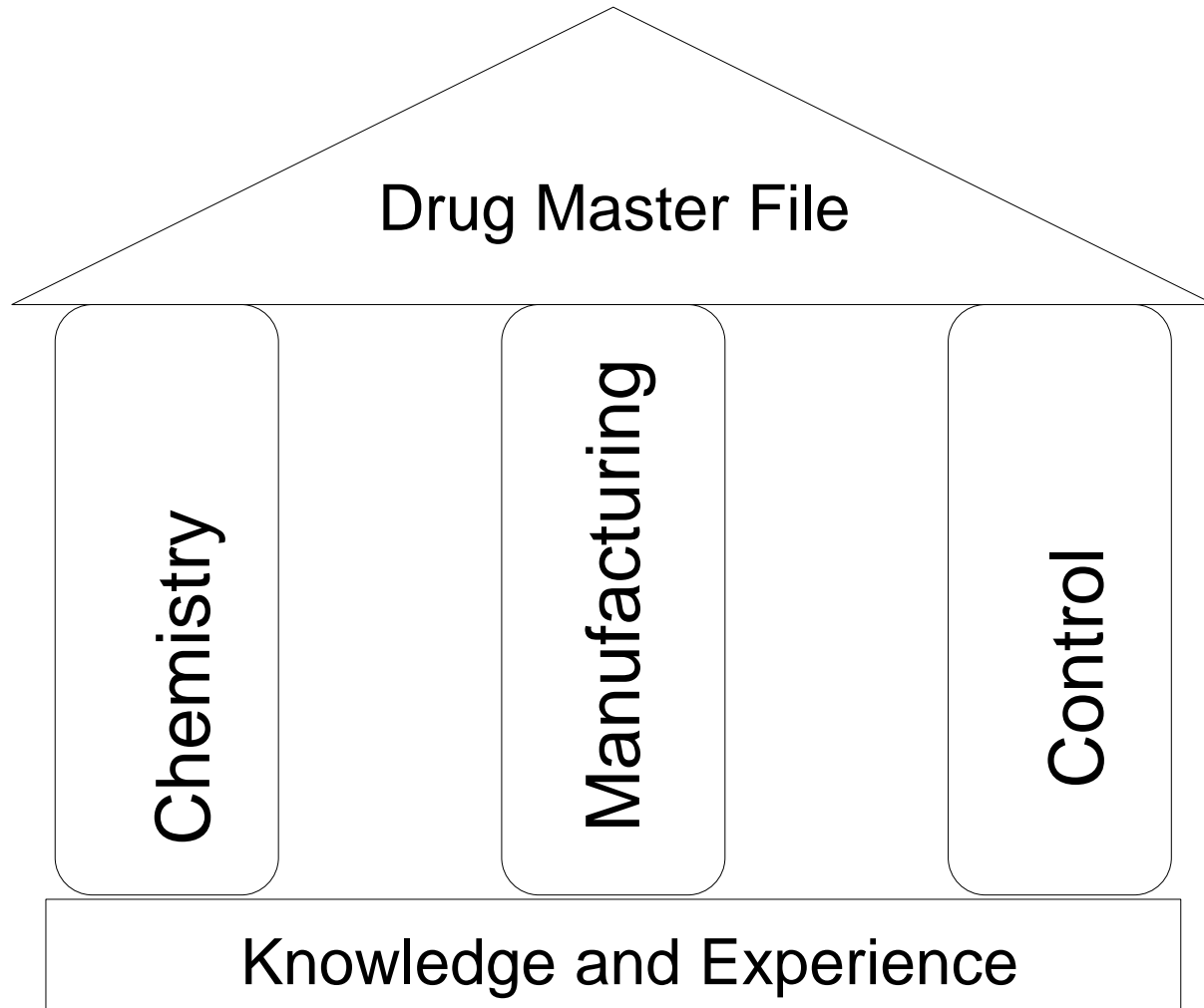
- Choose a flexible yet certified partner
- Consider EU release requires a QP (qualified person)
- Need to have access to a large variety of techniques
- Need to have Quality Standards and good documentation practices

Conclusion



- Good planning through knowledge and experience: Know your goal and your path
- Selection of reliable Outsourcing Partners
- Leading your partners by direction, decisions and trustbuilding communication

Conclusion



Don't build your house without an architect



The architects



Dr. Dieter Krimmer
Managing Partner at RPD
Project Manager at Roche

Track Record: Tamiflu, Saquinavir, Tenovovir,
Nelfinavir, Viread...



Dr. Robert Hett
Managing Partner at RPD
Site Manager at Carbogen
Senior Scientist at Sepracor, USA

Track Record: Bortezomib, Arformoterol...