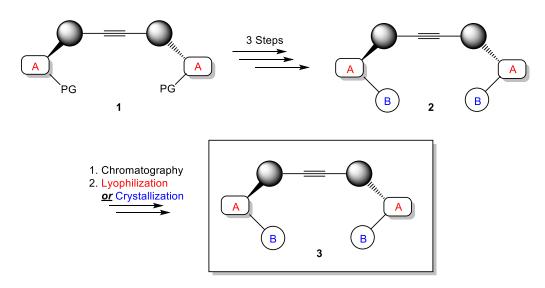
## From Catastrophy to Success

Emad El Sayed, Philipp Barth et al.

CARBOGEN AMCIS AG, Schachenallee 29, CH-5001 Aarau, Switzerland emad.el-sayed@carbogen-amcis.com

The target molecule (compound 3) was manufactured under cGMP conditions (2.5 – 3.0 kg) in five steps starting from a  $C_2$ -symmetric molecule (compound 1). After deprotection, purification via crystallization and coupling, compound 2 was obtained in good yields. The process was followed by a purification step via preparative HPLC chromatography, as seen in the scheme below.



Due to the lack of a crystallization method for the final purification and isolation of the target molecule (compound 3), a lyophilization was originally planned. Due to an unforeseen event [1] during the preparation of the lyophilization mixture, unexpectedly a crystallization method was discovered and developed. The incident will be presented and how the key crystallization was stumbled on.

[1] Unpublished results, Project Report No. RDE3173 2014