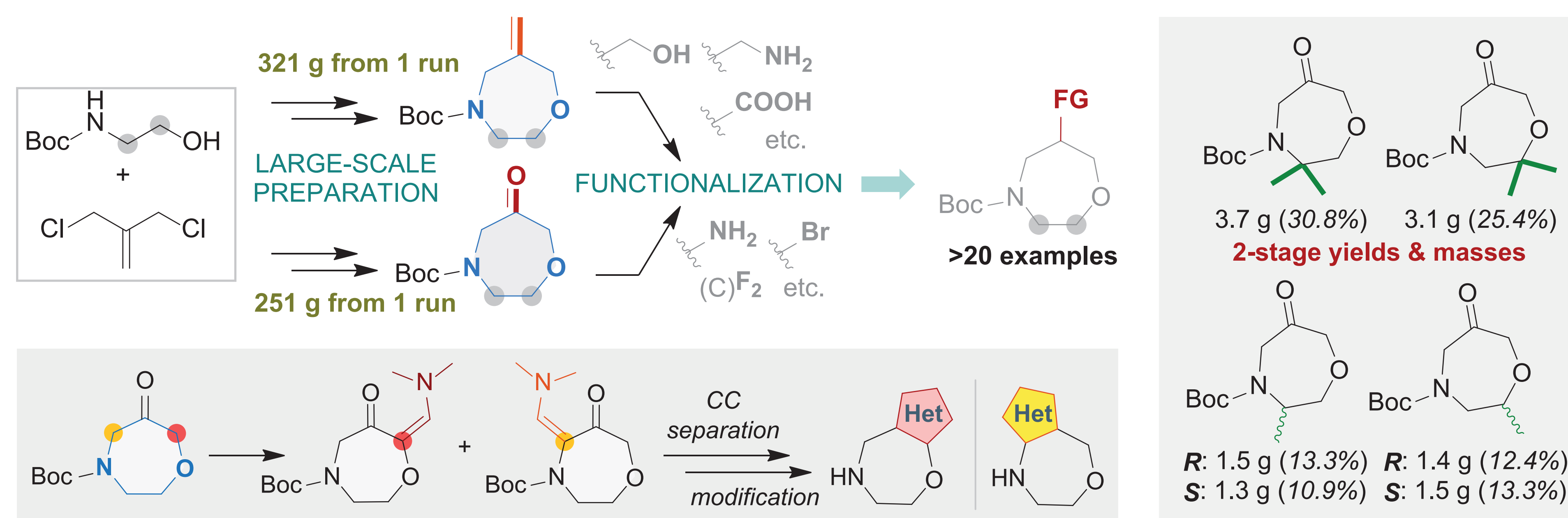


Chasing an elusive 1,5-oxazocane motif: A simple multigram approach to a rare chemotype



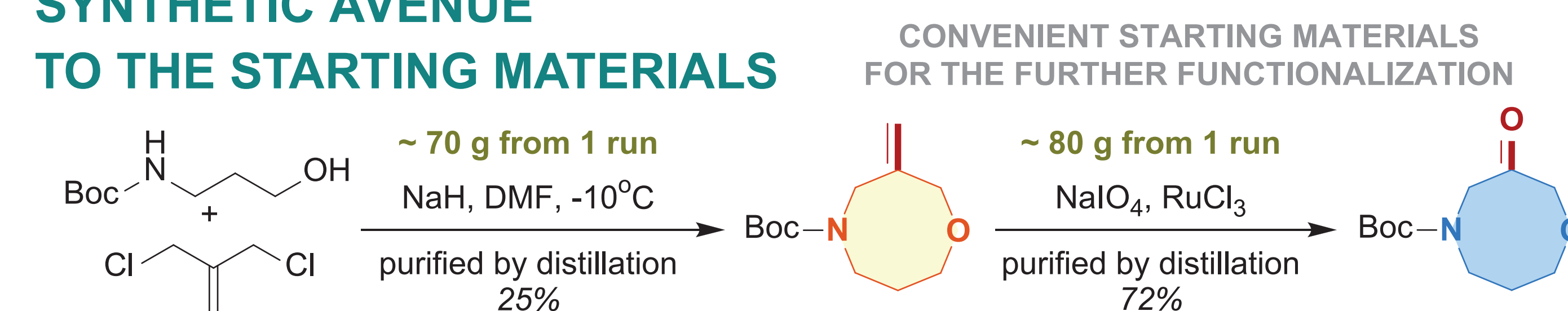
Oleksandr Kaliberda, Evgeniy Zarudnitskii, Dmytro Leha, Serhiy Ryabukhin, Dmytro Volochnyuk

Background & Overview of the Project



Synthetic results on functionalized 1,5-oxazocanes

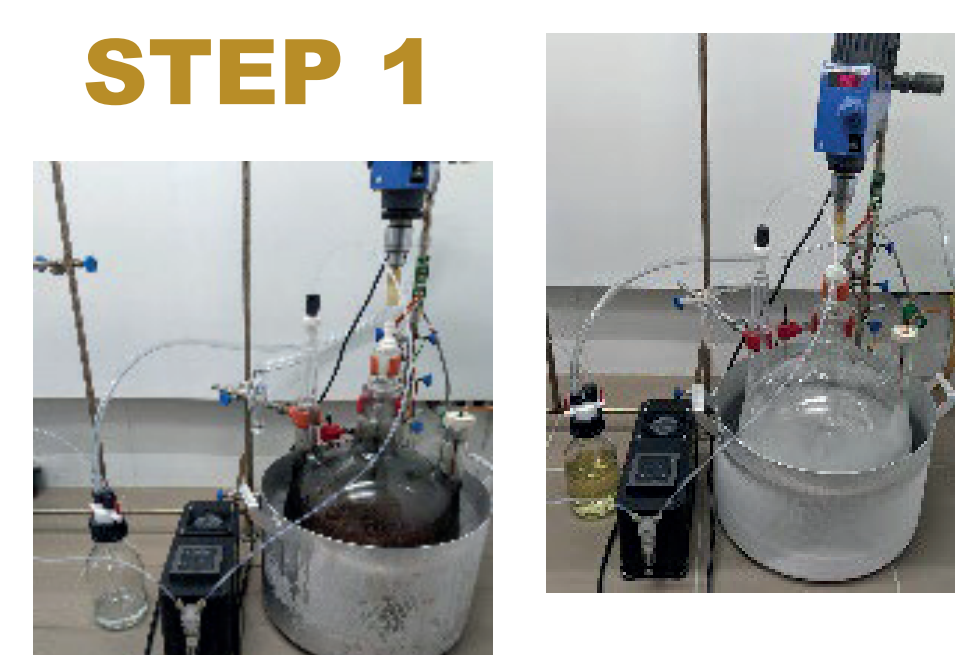
SYNTHETIC AVENUE TO THE STARTING MATERIALS



PRINCIPAL EXPERIMENTAL DETAILS:

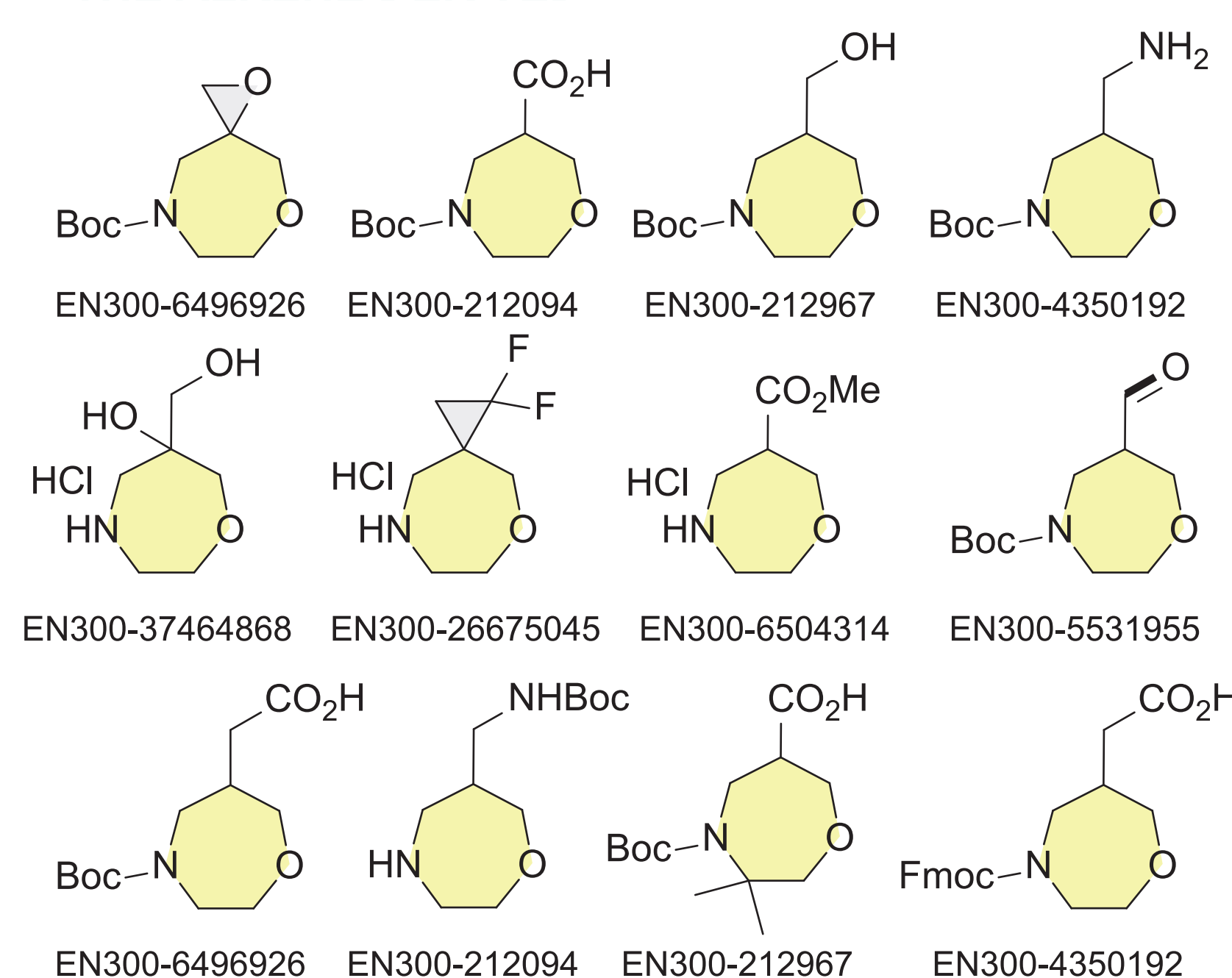
- both synthetic steps feature huge exotherm and uncontrolled foam formation
- in both stages the same equipment was used for the precise temperature measurement and control
- no chromatographic purification needed

STEP 2

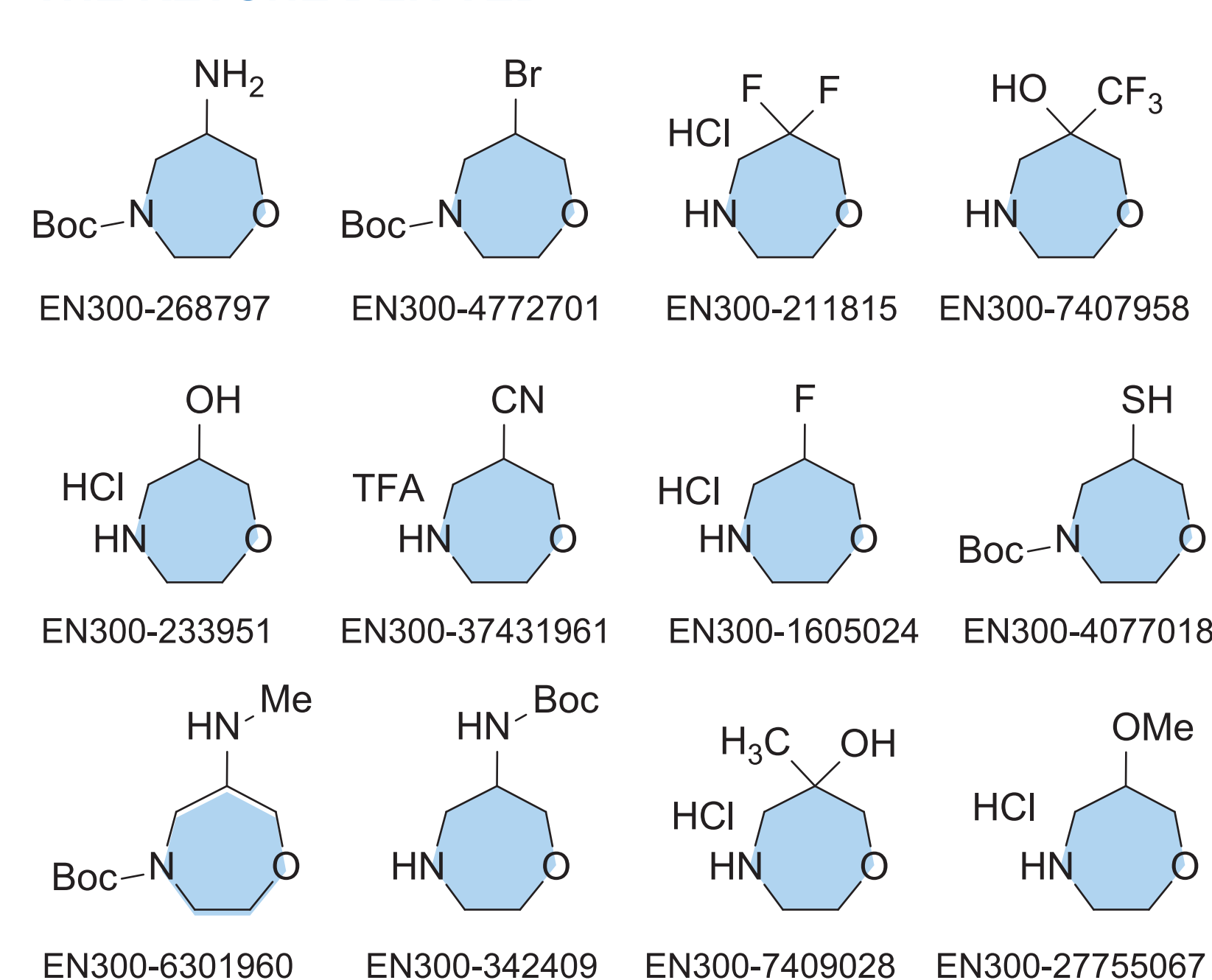


EXAMPLES OF MEDCHEM VALUABLE 1,4-OXAZEPANES ACHIEVED VIA WELL-KNOWN FUNCTIONAL GROUP INTERCONVERSIONS

THE ALKENE DERIVED



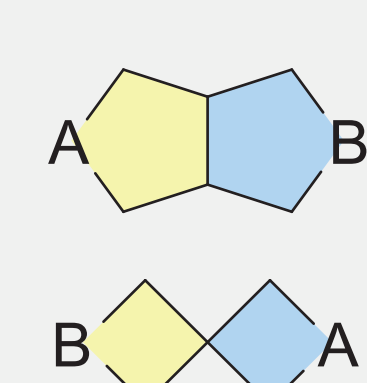
THE KETONE DERIVED



THIS WORK

- an exceptionally rare chemotype
- 3 paper and several patents so far
- homologous isosteres of morpholine and 1,4-diazepane

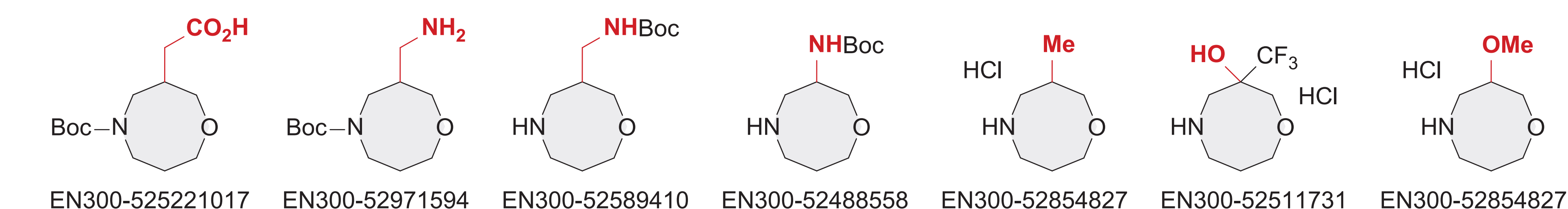
**CONFORMATIONALLY FLEXIBLE ANALOGUE OF
CORRESPONDING BYCYCLIC AND SPIRO HETEROCYCLES**



EVOLUTION OF THE RESEARCH



OTHER AVAILABLE IN STOCK OXAZOCANE BUILDING BLOCKS



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