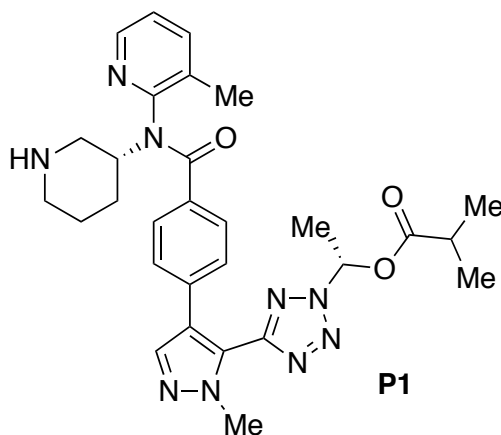


One strategy that has been pursued is inhibition of proprotein convertase subtilisin/kexin type 9 (PCSK9), which has been shown to decrease serum LDL-C levels. Pfizer recently reported prodrug **P1**, a small molecule inhibitor of PCSK9.

For this Team Challenge, you are part of a process chemistry team focused on meeting the multikilogram supply needs for clinical evaluation of **P1**. Working with your team, propose an efficient, scalable, and stereoselective route to access **P1**. You are not permitted to use a computer for this Team Challenge but may ask Keary regarding commercial availability of starting materials. *Bonus*: Identify the active form of **P1**. Why might a prodrug approach have been pursued in this case?



- Piotrowski, D. W.; Kamlet, A. S. *et al.*, *J. Am. Chem. Soc.* **2016**, *138*, 4818–4823.  
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