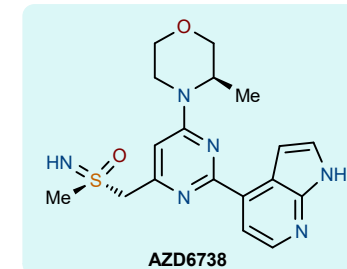


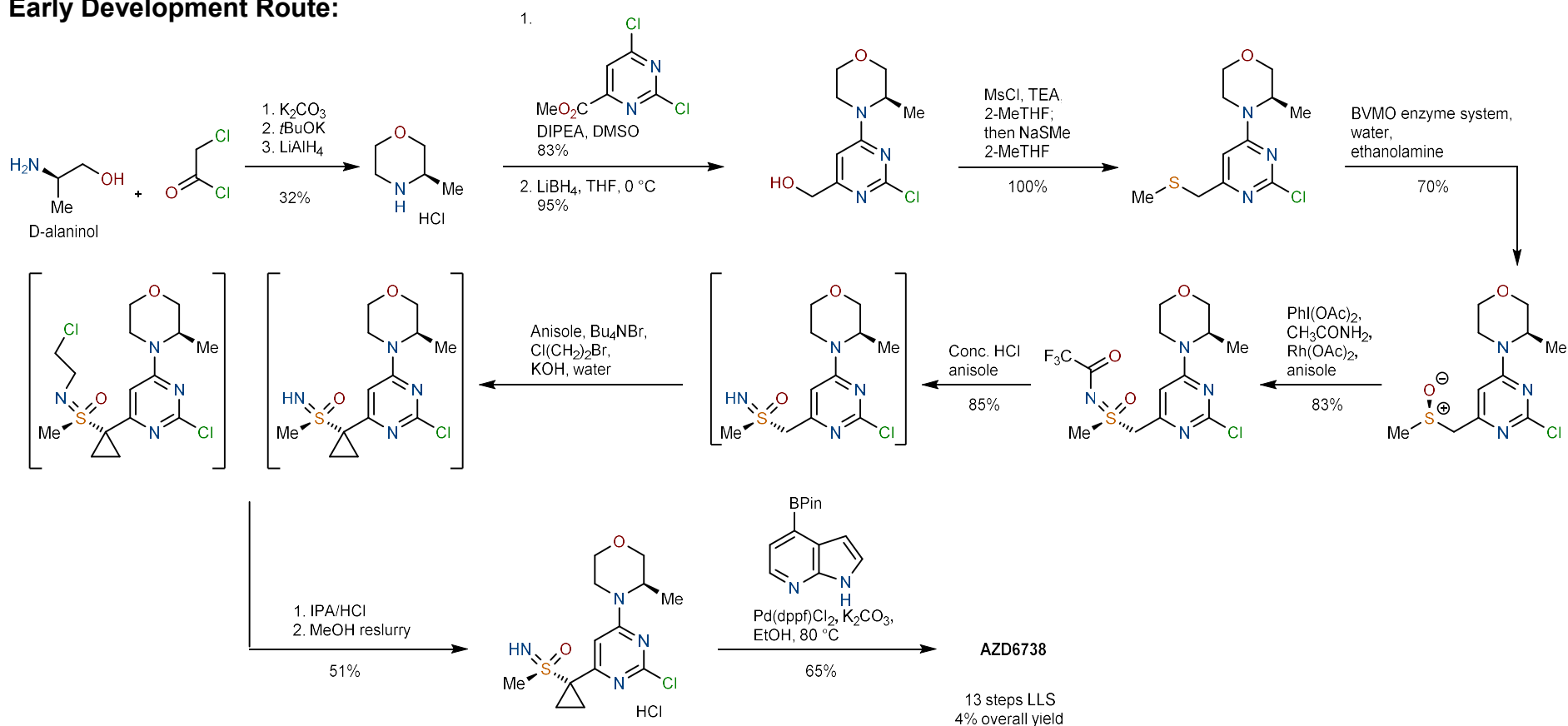


- Potent and selective inhibitor of ataxia telangiectasia mutated and RAD3-related (ATR)
  - Serine/threonine protein kinase that forms part of DNA-damage response
- Currently in multiple phase I/II clinical trials for treatment of cancer



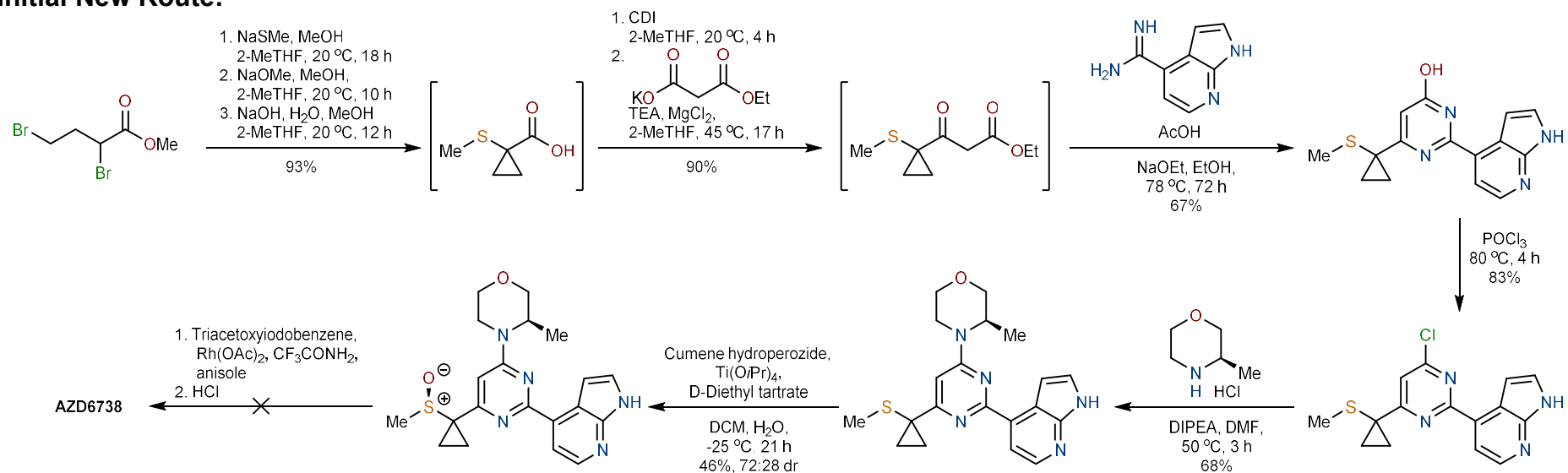
**Discovery Route:** See: DOTW 7/19/2019 by Sungjong Lee

## Early Development Route:

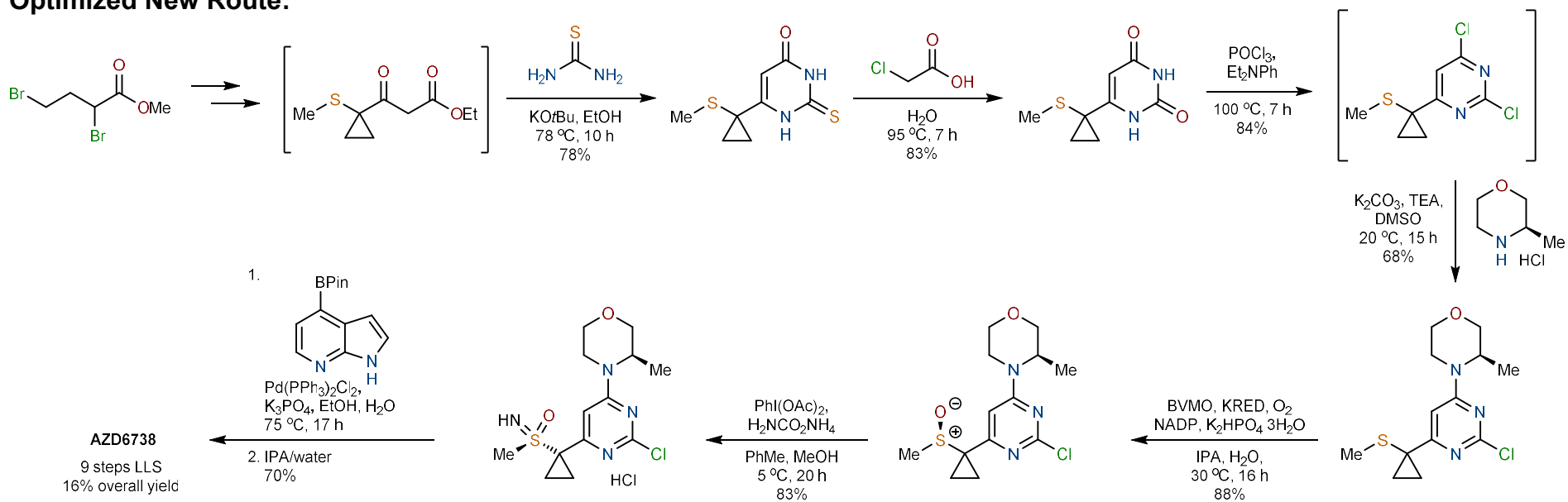


Graham, M. A. *Org. Process Res. Dev.* **2021**, 25, 43 <https://doi.org/10.1021/acs.oprd.0c00482>

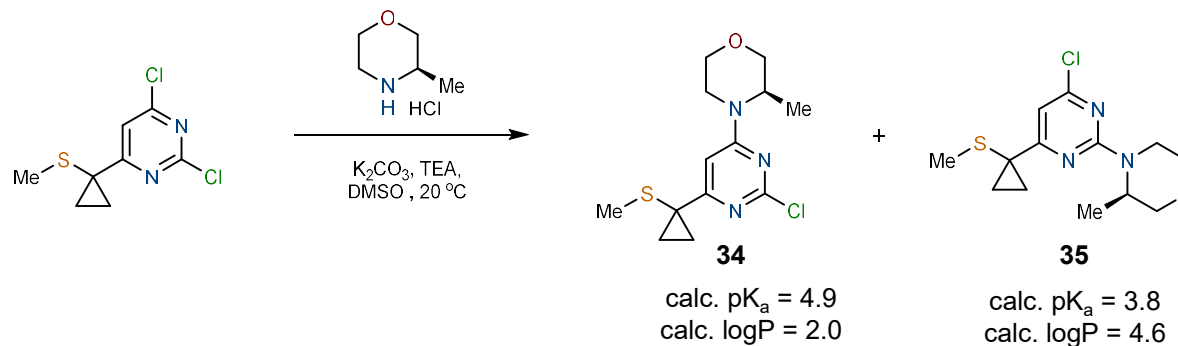
## Initial New Route:



## Optimized New Route:



# AZD6738 (Ceralastertib)



aqueous solution	aqueous layer		MTBE layer	
	34 (HPLC area %)	35 (HPLC area %)	34 (HPLC area %)	35 (HPLC area %)
pH 2.5 buffer	0	0	83	17
2 M HCl solution	100	0	73	27
4 M HCl solution	100	0	40	60
6 M HCl solution	98	2	5	95
12 M HCl solution	89	11	0	100

