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BOOK OF ABSTRACTS

AZIDE-TETRAZOLE TAUTOMERIC EQUILIBRIUM CONTROLLED SYNTHESIS OF INVERTED TETRAZOLO[1,5-*A*/*C*]QUINAZOLINES

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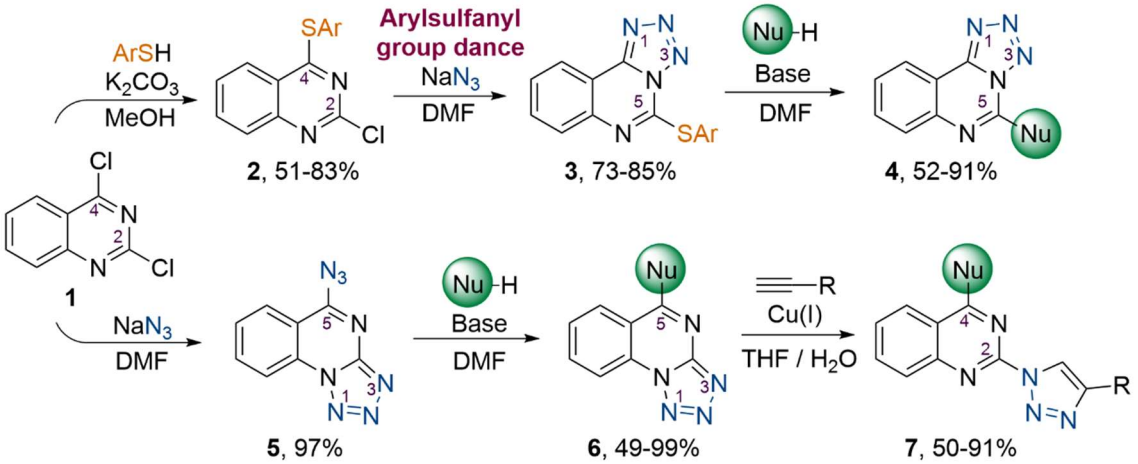
Quinazoline core is an example of privileged molecular scaffolds, which has already been proven as an effective tool in the treatment of different types of cancer.[1] We report unorthodox arylsulfanyl group dance around quinazoline core, leading to a variety of 5-substituted tetrazolo[1,5-*c*]quinazolines **3** and **4**.[2] On the other hand, inverted 5-substituted tetrazolo-[1,5-*a*]quinazolines **6** can be obtained via regioselective S_NAr reaction of tautomerically locked 2,4-diazidoquinazoline **5**.



2-/4-Azidoquinazoline derivatives exist in azide-tetrazole tautomeric equilibrium that is affected by temperature, solvent polarity, pH and substituent electron effects. The ratio of tautomers can be controlled to achieve favourable regioselectivity of further transformations, such as S_NAr, CuAAC and Staudinger reactions.

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REFERENCES

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[2] Jeminejs, A., Goliškina, S.M., Novosjolova, I., Stepanovs, D., Bizdēna, Ē., Turks, M. *Synthesis* **2021**, *53*(8), 1443-1456.