

SYNTHESIS OF PENTAMIDINE ANALOGUES BEARING HETEROCYCLIC PLATFORMS AND THEIR BIOLOGICAL EVALUATIONS



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May 25-27th

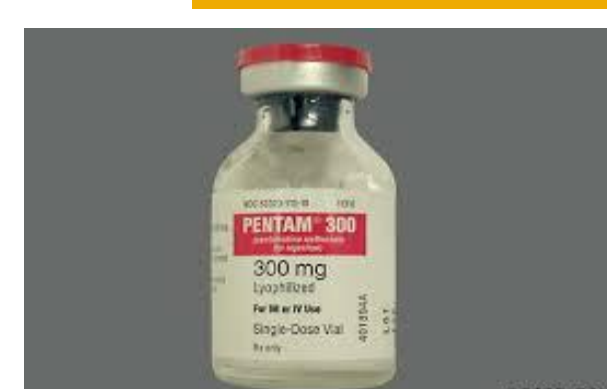
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CONTEXT OF THE WORK

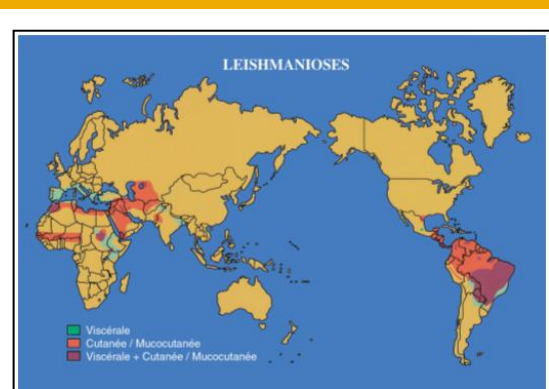
"Pentamidine" model against *leishmania* and malaria



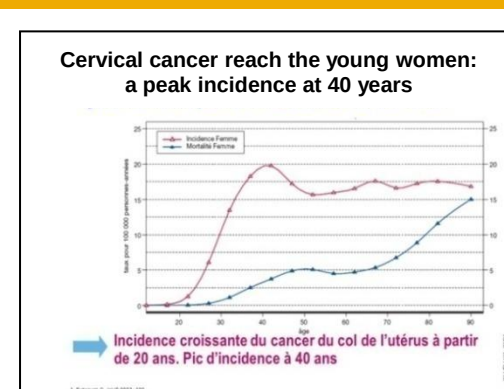
Pentamidine



KILLS 3000 CHILDREN EVERYDAY

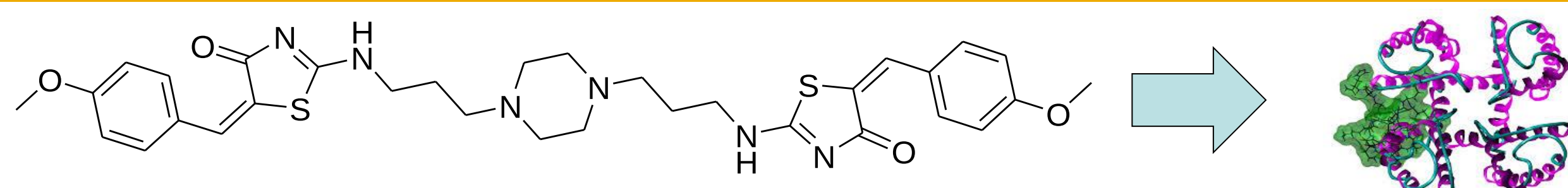


2nd PARASITIC DISEASE : 60 000 DEATHS EACH YEAR



3rd HIGHEST DEATH RATE IN THE WORLD: 8.2 MILLIONS DEATHS IN 2012

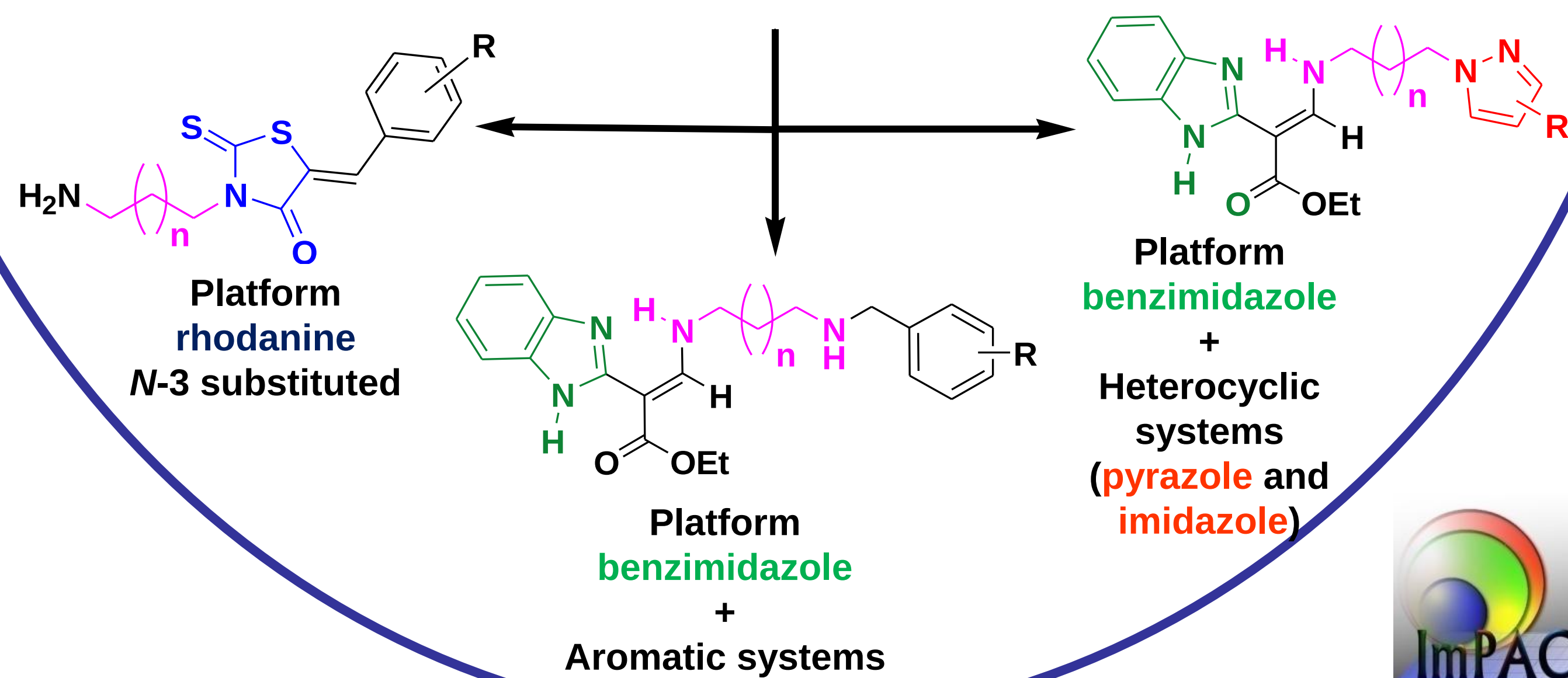
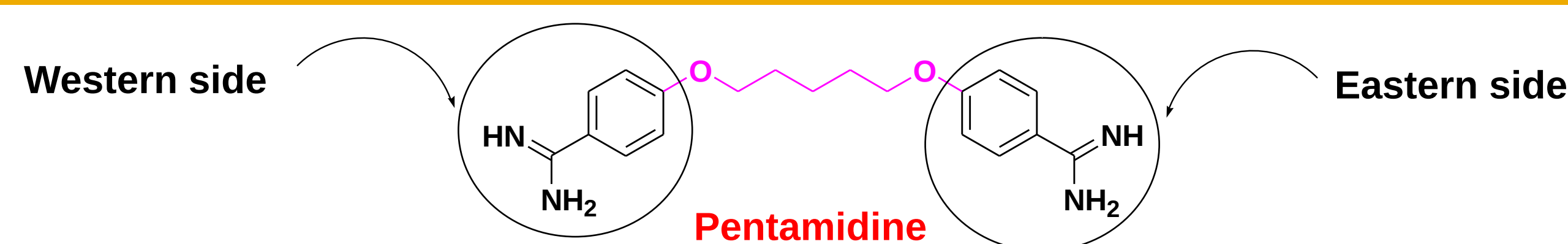
Previous works with significant biological activities



***N,N'*-Bis(5-arylidene-4-oxo-4,5-dihydrothiazolin-2-yl)aminopropylpiperazine**

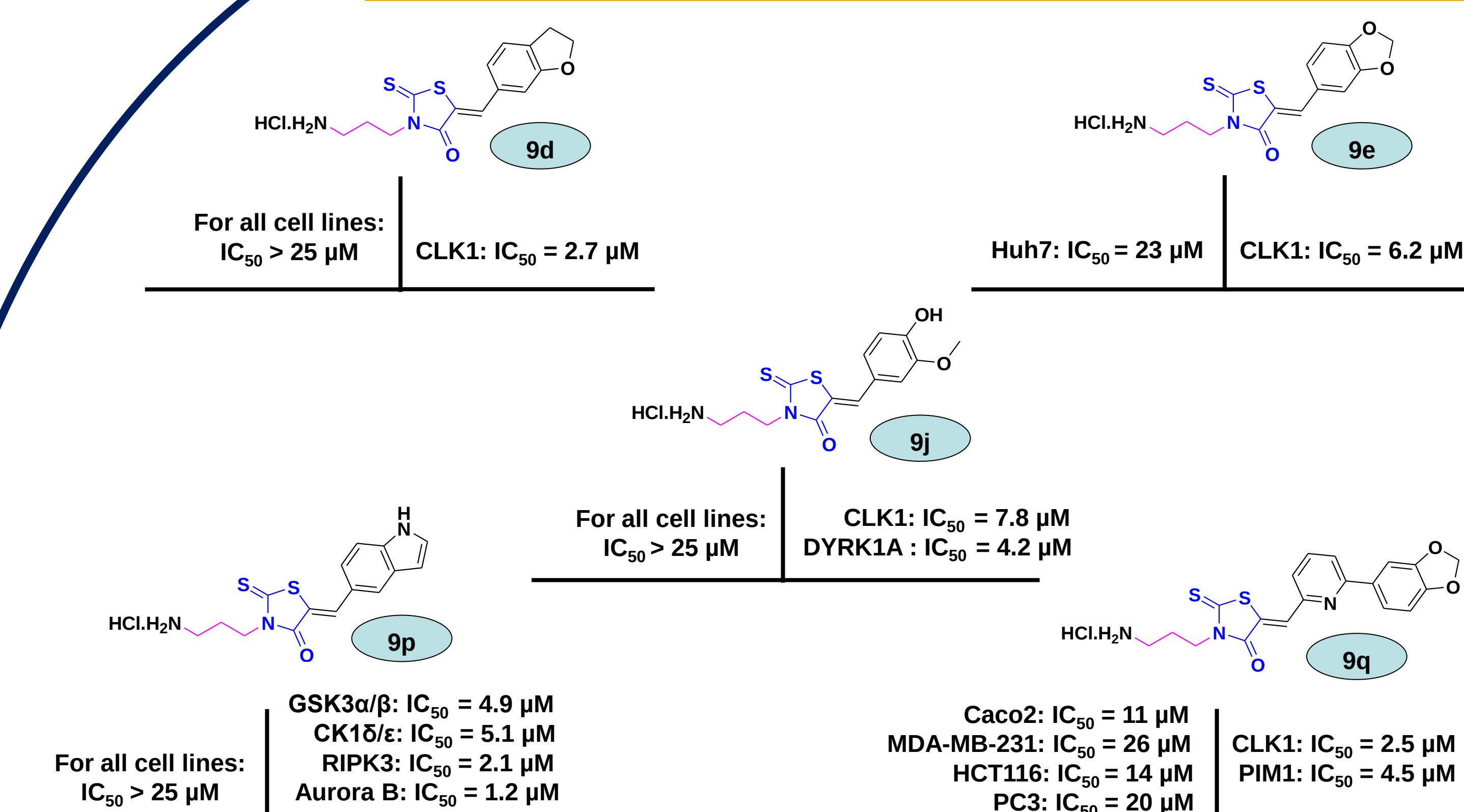
**DYRK1A, IC₅₀ = 40 nM
GSK3α/β, IC₅₀ = 8.5 μM**

Pharmacomodulations derived from pentamidine

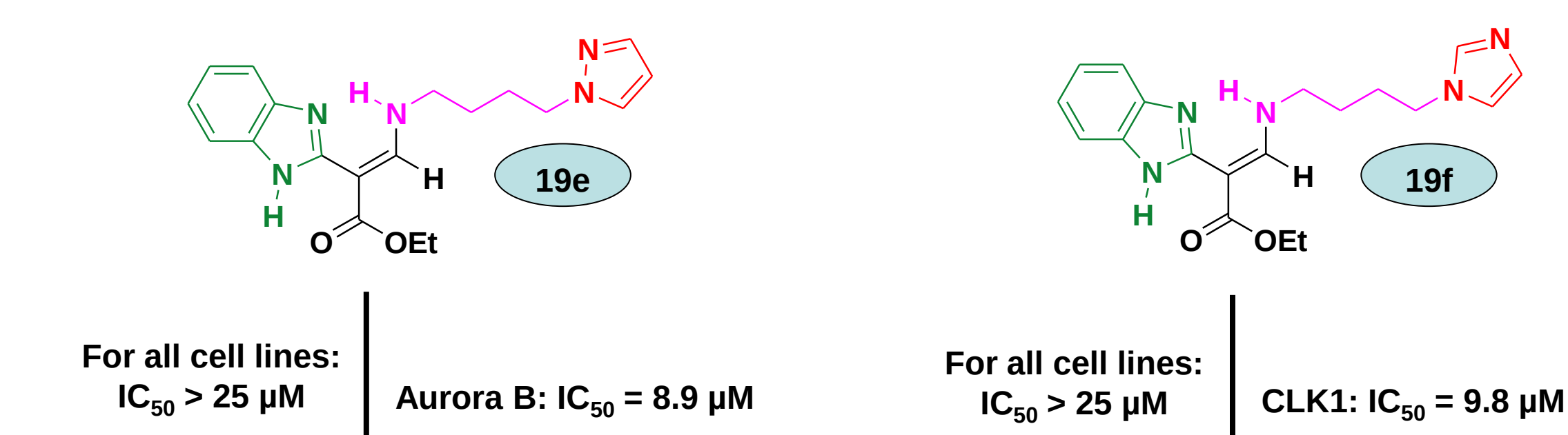


BIOLOGICAL RESULTS

Significant results for Scheme 1

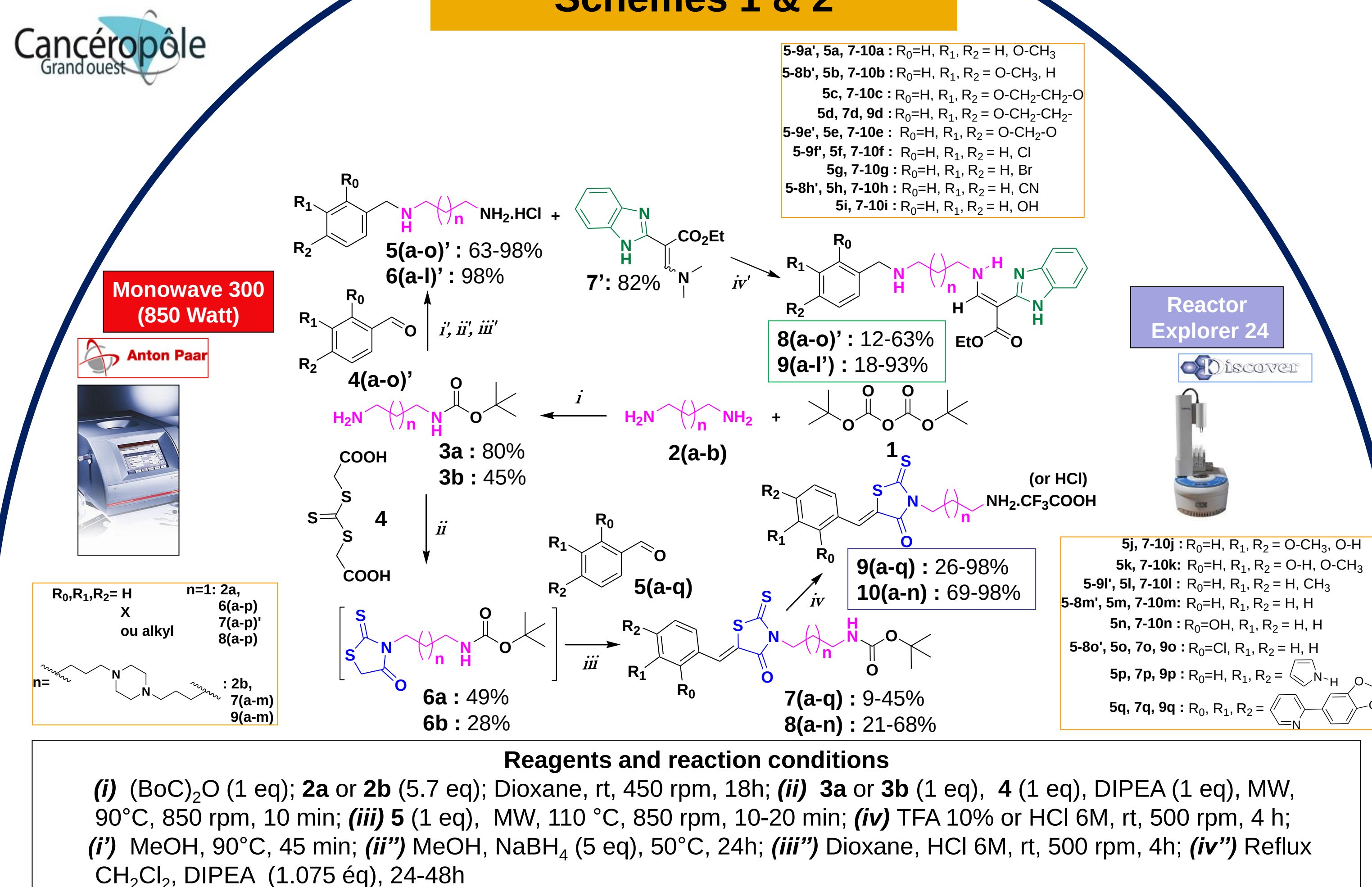


Significant results for Scheme 3

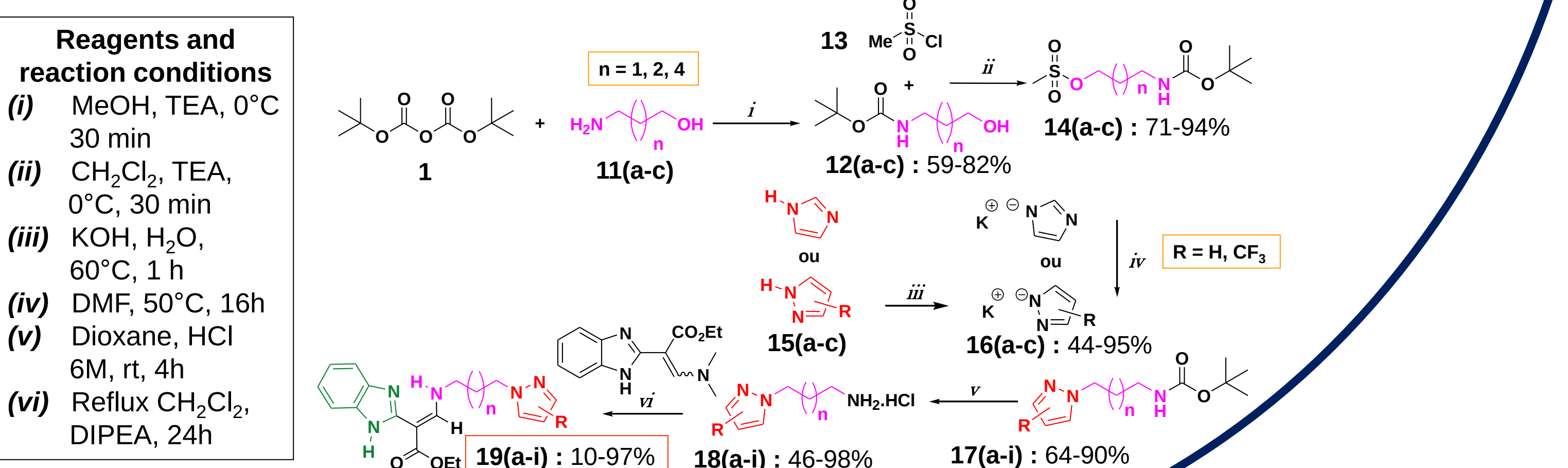


Chemical molecules with anticancer property which can allow synthesis of a new platform of inhibitors of kinases

Schemes 1 & 2



Scheme 3



PLAN OF SYNTHESIS

References

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Acknowledgments for



THE TEAM