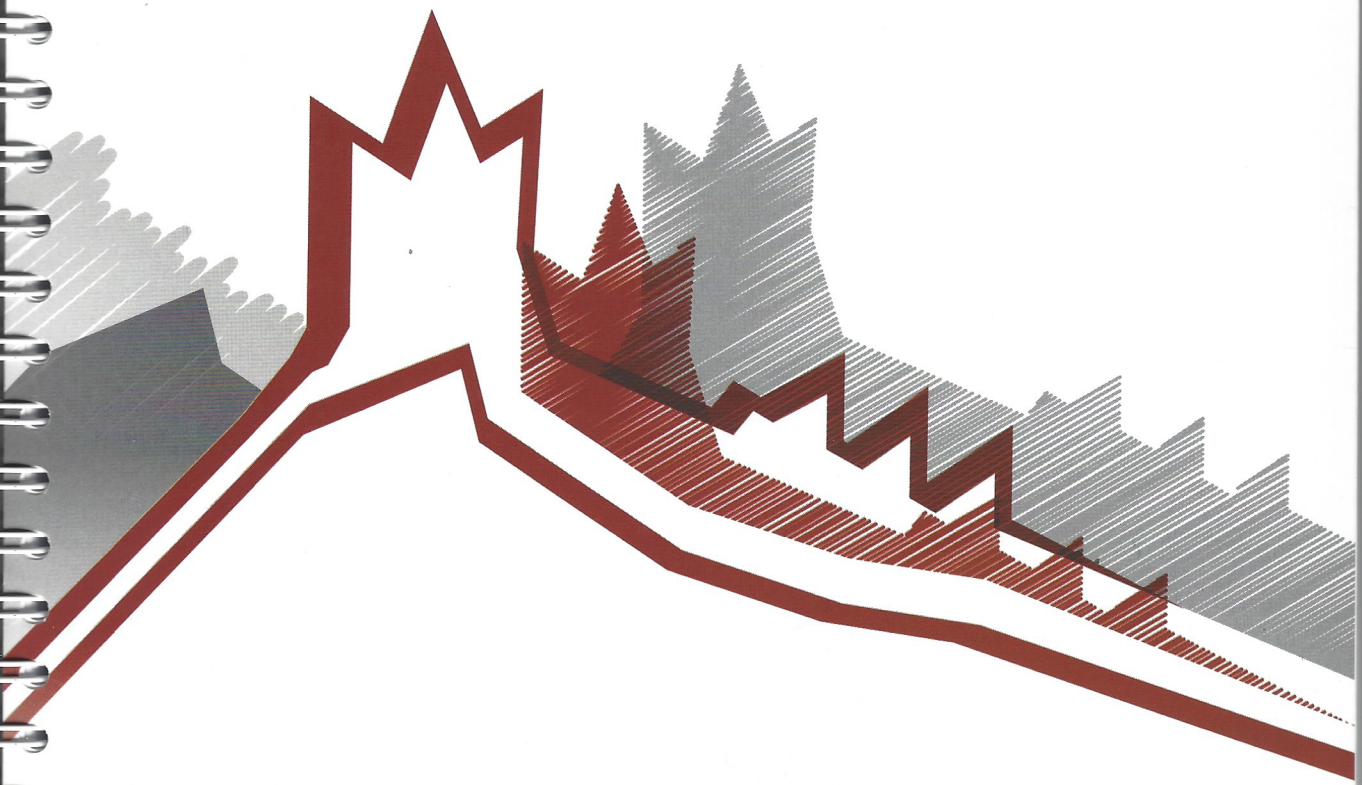

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PROGRAM AND ABSTRACTS

SYNTHESIS OF NEW AZIRIDINE AND AZETIDINE DERIVATIVES AS POTENTIAL MMP-2 INHIBITORS

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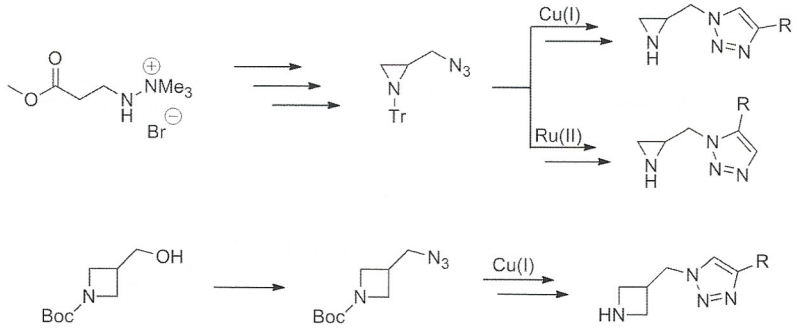
Matrix metalloproteinases (MMPs) are zinc-dependent endopeptidases that are responsible for cleavage of extracellular matrix proteins. Because of their effect on both physiological and pathological processes, MMPs, especially MMP-2, have become interesting targets for treatment of cancer.
Previously, we have reported promising results for aziridine derivatives with 1,4-disubstituted 1,2,3-triazole in the side chain as a new class of MMP-2 inhibitors.[1,2] Herein we describe an expansion of aziridine series by preparing both 1,5- and 1,4-disubstituted 1,2,3-triazole derivatives. Also azetidine-triazole conjugates were prepared. The syntheses were realized by transition metal catalyzed azide-alkyne cycloaddition reactions (CuAAC or RuAAC).



The products acting as selective MMP-2 inhibitors were found among aziridine 1,4-disubstited 1,2,3-triazole conjugates.

Acknowledgement
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References

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