CONTENTS

CHAPTER-I

Introduction to Pyrimidinone and Thiazoles

1.0 Introduction ............................................ 2
1.1 Significance of heterocyclic compounds .......... 4
1.2 Introduction to pyrimidinones ......................... 5
1.3 Biological significance of pyrimidinones .......... 6
1.4 Introduction to Thiazoles ............................ 22
1.5 Biological significance of Thiazoles ................. 23
1.6 Scope of the present work ............................ 35

References ............................................... 37

CHAPTER-II

Synthesis, Characterisation, Anti-microbial and Anti-angiogenic Activity of 3-(2-chloroethyl)-2-methyl-6,7,8,9-tetrahydro-4H-pyrido[1,2-a]pyrimidin-4-one Derivatives

2.0 Materials and methods .................................. 47
2.1 Introduction ............................................. 47
2.2 General procedure for synthesis of 3-(2-chloroethyl)-2-methyl-6,7,8,9-tetrahydro-4H-pyrido[1,2-a]pyrimidin-4-one derivatives .......... 49
2.2.1 Synthesis of 3-(2-chloroethyl)-2-methyl-6,7,8,9-tetrahydro-4H-pyrido[1,2-a]pyrimidin-4-one derivatives ........................................ 49
2.3 Antimicrobial activity of 3-(2-chloroethyl)-2-methyl-6,7,8,9-tetrahydro-4H-pyrido[1,2-a]pyrimidin-4-one derivatives

2.3.7 Results and discussion

2.3.8 Conclusion

2.4 General procedure for synthesis of 2-methyl-3-(2-(piperazin-1-yl)ethyl)-6,7,8,9-tetrahydro-4H-pyrido[1,2-a]pyrimidin-4-one derivatives

2.4.1 Synthesis of 2-methyl-3-(2-(piperazin-1-yl)ethyl)-6,7,8,9-tetrahydro-4H-pyrido[1,2-a]pyrimidin-4-one derivatives

2.4.2 Antimicrobial activity of 2-methyl-3-(2-(piperazin-1-yl)ethyl)-6,7,8,9-tetrahydro-4H-pyrido[1,2-a]pyrimidin-4-one derivatives

2.4.3 Results and discussion

2.4.4 Conclusion

2.5 Anti-angeogenic effects of 2-methyl-3-(2-(piperazin-1-yl)ethyl)-6,7,8,9-tetrahydro-4H-pyrido[1,2-a]pyrimidin-4-one derivatives

2.7 Results and discussion

2.8 Conclusion

2.9 \(^1\)H NMR spectrum of the synthesized compounds

References

CHAPTER-III


3.0 General procedure for the synthesis of 1-(substitutedphenyl)-3-6-ethoxybenzo[d]thiazol-2-ylthiourea derivatives
3.1 Synthesis of 1-(substituted phenyl)-3-(6-ethoxybenzo[d]thiazol-2-yl)thiourea derivatives

3.2 Anti-cancer and angio-inhibitory effects of 1-(substituted phenyl)-3-(6-ethoxybenzo[d]thiazol-2-yl)thiourea derivatives

3.3 Results and discussion

3.4 Conclusion

3.5 $^1$H NMR spectrum of the synthesized compounds

3.6 General procedure for the synthesis of N-(benzyl)-6-ethoxybenzo[d]thiazol-2-amine derivatives

3.6.1 Synthesis of N-(benzyl)-6-ethoxybenzo[d]thiazol-2-amine derivatives

3.7 Anti-cancer and angio-inhibitory effects of N-(benzyl)-6-ethoxybenzo[d]thiazol-2-amine derivatives

3.8 Results and discussion

3.8.5 Conclusion

3.9 $^1$H NMR spectrum of the synthesized compounds

4.0 General procedure for the synthesis of N-(benzylidene)-6-ethoxybenzo[d]thiazol-2-amine derivatives

4.1 Synthesis of N-(benzylidene)-6-ethoxybenzo[d]thiazol-2-amine derivatives

4.2 Anti-diabetic activity of N-(benzylidene)-6-ethoxybenzo[d]thiazol-2-amine derivatives

4.4 Results and discussion

4.5 Conclusion

4.6 LC/MS spectra of synthesized compounds

References