Synthesis and Evaluation of in Vitro Bioactivity for Polysubstituted N-Arylpyrazole Derivatives

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New polysubstituted *N*-arylpyrazole derivatives were synthesized from *N*1-arylsydnone with acetylene and boronic acid, including 2-thiophenyl, 3-thiophenyl, 2-benzo[*b*]thiophenyl, or dibenzothiophenyl-4-boronic acid, via 1,3-diploar cycloaddition and Suzuki coupling reaction. Based on the growth inhibitory activity results against lung carcinoma (NCI-H226), nasopharyngeal (NPC-TW01), and T-cell leukemia (Jurkat) cancer cells, compounds **5d** and **7d** possessed the significant inhibitory activity for NPC-TW01 (32 μM and 16 μM) and NCI-H226 (16 μM and 8.9 μM), respectively.