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ORAL

Response to a 2-Indolinones laboratory based regimen analogous in cancerous-infected cells

Rahul Hajare

Department of QAT, Rajgad Dnyanpeeth's College of Pharmacy, Bhor India Mahad Naka Bhor, Bhor, Maharastra 412206, India

Abstract

2-Indolinone is multifunctional expressed by drug discovery series of novel 97 compounds were synthesized for anticancer and cytotoxic activity against different 60 cell line cultures [1]. 07 compounds were selected on molecular recognition and screened for anticancer study [2]. Among those is screened compounds RH8, RH 42, RH84, RH89, RH90, RH 94, RH97 found good quality of anticancer activity against most of the cancer cell line with ranges from -77.23 to 55.85% growth. Target compound 5-Flouro-1-benzyl isatin -2, 3-b-quinoxaline (RH-89) display -77.23 to 7.31% growth & another target compound RH 94 display -64.78 to 65.14% growth against most of the leukemic cell lines, while RH-08 has shown very good activity against CCRF-CEM cell line with -31.85% growths and weak anticancer activity against breast cancer cell line with 53.47% growth, but failed to respond against other leukemic cell lines. RH-89 has also shown moderate activity against non-small cell-lung cancer (HOP-62) with 34.69% growth. RH-90 has shown good anticancer activity against leukemic cell line SR with 18.70% growth and weak activity against Non small cell lung cancer HOP-92 and NCL-H322M with 57.14 and 57.20% growth respectively. The cytotoxic property [3] of 2-indolinone analogs, among 3-benzohydrazide (RH 06-64) series, RH-22 and 28 were found to be most cytotoxic against L-1210 cell line (9 and 6 µg/ml). RH-33 was found to be cytotoxic against CEM/0 cell line (6.9 µg/ml). Among 3-isonicotinohydrazide derivatives (RH 65-72), RH-70 was found to have better cytotoxic property against all three types of cell lines (6.1-6.7 µg/ml).From 3-quinazolin-4(3H)-one series (RH 74-82), RH-75 was found to be better cytotoxic against Molt4/8 cell line (6.0 µg/ml) and RH-77 was found to have better cytotoxicity against L1210 cell line (9µg/ml) remaining compounds RH-79, 80, 82 have shown moderate to weak cytotoxic property. Among 6H-indolo [2,3-b]quinoxaline derivatives (RH 83-96), RH-92 have shown better cytotoxic property against L1210 cell line(7.2 µg/ml).

*For correspondence:

rahulhajare@rediffmail.com

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