Wiley Online Library



Oxadiazole derivatives R 0290

41- 147

DOI: 10.1002/chin.201441147

One-Pot, Four-Component Synthesis of Novel Cytotoxic Agents 1-(5-Aryl-1,3,4-oxadiazol-2-yl)-1-(1H-pyrrol-2-yl)methanamines. — Some new compounds, e.g. (Vd), (Vf) and (Vg), exhibit better or comparable cytotoxic activities against cancer cell lines A549, HT29 or HT1080 in comparison to the reference drug doxorubicin. Moreover, the cytotoxic activity of compounds (Vc) and (Ve) against MCF-7 is better than that of doxorubicin. — (SHAFIEE*, A.; et al.; Eur. J. Med. Chem. 78 (2014) 151-156, http://dx.doi.org/10.1016/j.ejmech.2014.03.049; Dep. Med. Chem., Fac. Pharm., Tehran Univ. Med. Sci., Tehran, Iran; Eng.) — C. Cyrus

$$\begin{array}{c} & \text{Ar}^{1} ^{\wedge} \text{NH}_{2} \text{ (II), } \text{ CN-N=P(Ph)}_{3} \text{ (III)} \\ & \text{Ar}^{2} ^{\wedge} \text{OH} \text{ (IV)} \\ & \text{CH}_{2} ^{\text{Cl}}_{2}, 25^{\circ} \text{C} \\ & \text{I} \\ & \text{QAr}^{1}, \text{Ar}^{2}. -\text{Ph} \\ & \text{B5\%} \\ & \text{bAr}^{1}. -\text{Ph}; \text{Ar}^{2}: -\text{O-Me} \\ & \text{B8\%} \\ & \text{CAr}^{1}. -\text{Ph}; \text{Ar}^{2}: -\text{Cl} \\ & \text{B6\%} \\ & \text{dAr}^{1}\cdot -\text{Ph}; \text{Ar}^{2}: -\text{Cl} \\ & \text{B6\%} \\ & \text{eAr}^{1}\cdot -\text{Tol}; \text{Ar}^{2}\cdot -\text{Br} \\ & \text{B6\%} \\ & \text{fAr}^{1}: -\text{Cl}; \text{Ar}^{2}: -\text{Br} \\ & \text{B6\%} \\ & \text{gAr}^{1}\cdot -\text{Cl}; \text{Ar}^{2}: -\text{Br} \\ & \text{B5\%} \\ & \text{hAr}^{1}: -\text{O-Me}; \text{Ar}^{2}: -\text{Ph} \\ & \text{90\%} \end{array}$$