

Drug interactions in cancer therapy

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The references cited in Box 1 of this article were incorrect. The corrected box and references are reproduced below. The authors apologize for the error.

Box 1 | Substrates and inhibitors of ABCB1 used in anticancer therapy

Substrates

Actinomycin D¹⁵¹; daunorubicin¹⁵²; docetaxel¹⁵³; doxorubicin¹⁵⁴; etoposide¹⁵⁵; imatinib mesylate¹⁵⁶; irinotecan¹⁵⁷; mitoxantrone¹⁵⁸; paclitaxel¹⁵⁹; topotecan¹⁶⁰; vinblastine¹⁵⁴; vincristine¹⁶¹.

Inhibitors

Gefitinib¹⁶²; tariquidar¹⁶³; teniposide¹⁶⁴; valspodar (PSC 833)¹⁶⁵.

151. de Bruijn, M. H., Van der Blik, A. M., Biedler, J. L. & Borst, P. Differential amplification and disproportionate expression of five genes in three multidrug-resistant Chinese hamster lung cell lines. *Mol. Cell. Biol.* **6**, 4717–4722 (1986).
152. Kartner, N., Shales, M., Riordan, J. R. & Ling, V. Daunorubicin-resistant Chinese hamster ovary cells expressing multidrug resistance and a cell-surface P-glycoprotein. *Cancer Res.* **43**, 4413–4419 (1983).
153. Ringel, I. & Horwitz, S. B. Studies with RP 56976 (taxotere): a semisynthetic analogue of taxol. *J. Natl Cancer Inst.* **83**, 288–291 (1991).
154. Ueda, K., Cardarelli, C., Gottesman, M. M. & Pastan, I. Expression of a full-length cDNA for the human “MDR1” gene confers resistance to colchicine, doxorubicin, and vinblastine. *Proc. Natl Acad. Sci. USA* **84**, 3004–3008 (1987).
155. Pastan, I. *et al.* A retrovirus carrying an MDR1 cDNA confers multidrug resistance and polarized expression of P-glycoprotein in MDCK cells. *Proc. Natl Acad. Sci. USA* **85**, 4486–4490 (1988).
156. Hegedus, T. *et al.* Interaction of tyrosine kinase inhibitors with the human multidrug transporter proteins, MDR1 and MRP1. *Biochim. Biophys. Acta* **1587**, 318–325 (2002).
157. Jansen, W. J. *et al.* CPT-11 sensitivity in relation to the expression of P170-glycoprotein and multidrug resistance-associated protein. *Br. J. Cancer* **77**, 359–365 (1998).
158. Schurr, E., Raymond, M., Bell, J. C. & Gros, P. Characterization of the multidrug resistance protein expressed in cell clones stably transfected with the mouse *mdr1* cDNA. *Cancer Res.* **49**, 2729–2733 (1989).
159. Lothstein, L., Hsu, S. I., Horwitz, S. B. & Greenberger, L. M. Alternate overexpression of two P-glycoprotein [corrected] genes is associated with changes in multidrug resistance in a J774. 2 cell line. *J. Biol. Chem.* **264**, 16054–16058 (1989).
160. Hendricks, C. B., Rowinsky, E. K., Grochow, L. B., Donehower, R. C. & Kaufmann, S. H. Effect of P-glycoprotein expression on the accumulation and cytotoxicity of topotecan (SK&F 104864), a new camptothecin analogue. *Cancer Res.* **52**, 2268–2278 (1992).
161. Horton, J. K., Houghton, P. J. & Houghton, J. A. Reciprocal cross-resistance in human rhabdomyosarcomas selected *in vivo* for primary resistance to vincristine and L-phenylalanine mustard. *Cancer Res.* **47**, 6288–6293 (1987).
162. Kitazaki, T. *et al.* Gefitinib, an EGFR tyrosine kinase inhibitor, directly inhibits the function of P-glycoprotein in multidrug resistant cancer cells. *Lung Cancer* **49**, 337–343 (2005).
163. Martin, C. *et al.* The molecular interaction of the high affinity reversal agent XR9576 with P-glycoprotein. *Br. J. Pharmacol.* **128**, 403–411 (1999).
164. Wolverson, J. S., Danks, M. K., Schmidt, C. A. & Beck, W. T. Genetic characterization of the multidrug-resistant phenotype of VM-26-resistant human leukemic cells. *Cancer Res.* **49**, 2422–2426 (1989).
165. Boesch, D. *et al.* *In vivo* circumvention of P-glycoprotein-mediated multidrug resistance of tumor cells with SDZ PSC 833. *Cancer Res.* **51**, 4226–4233 (1991).