Publikationen über den Chemotherapie-Resistenz-Test (CTR-Test®)

Nachfolgend finden Sie eine Auswahl der bedeutendsten Publikationen zu klinischen Studien und zur Anwendung des Chemotherapie-Resistenz-Tests – auch Extreme Drug Resistance Assay genannt – bei der Analyse von Patientenproben (Validierungsstudien).

Klinische Studien

Die folgenden klinischen Studien belegen die Vorhersagekraft des Tests und dessen Nutzen für den Patienten.

1. Highly specific prediction of antineoplastic drug resistance with an in vitro assay using suprapharmacologic drug exposures. Kern DH, Weisenthal LM
J Natl Cancer Inst. 1990 Apr 4;82(7):582-8.

2. Cost-effective treatment of women with advanced ovarian cancer by cytoreductive surgery and chemotherapy directed by an in vitro assay for drug resistance. Orr JW Jr, Orr P, Kern DH
Cancer J Sci Am. 1999 May-Jun;5(3):174-8.

3. Breast cancer survival and in vitro tumor response in the extreme drug resistance assay. Mehta RS, Bornstein R, Yu IR, Parker RJ, McLaren CE, Nguyen KP, Li KT, Fruehauf JP
Breast Cancer Res Treat. 2001 Apr;66(3):225-37.

4. Association between in vitro platinum resistance in the EDR assay and clinical outcomes for ovarian cancer patients. Holloway RW, Mehta RS, Finkler NJ, Li KT, McLaren CE, Parker RJ, Fruehauf JP
Gynecol Oncol. 2002 Oct;87(1):8-16.

5. Survival outcomes in patients with recurrent ovarian cancer who were treated with chemoresistance assay-guided chemotherapy. Loizzi V, Chan JK, Osann K, Cappuccini F, DiSaia PJ, Berman ML
Am J Obstet Gynecol. 2003 Nov;189(5):1301-7.

6. A prospective blinded study of the predictive value of an extreme drug resistance assay in patients receiving CPT-11 for recurrent glioma. Parker RJ, Fruehauf JP, Mehta R, Filka E, Cloughesy T
J Neurooncol. 2004 Feb;66(3):365-75.

7. Differences of chemoresistance assay between invasive micropapillary / low-grade serous ovarian carcinoma and high-grade serous ovarian carcinoma. Santillan A, Kim YW, Zahurak ML, Gardner GJ, Giuntoli RL, Shih IM, Bristow RE
Int J Genecol Cancer 2007. 2007 May-Jun;17(3):601-6.

8. Extreme drug resistance is common after prior exposure to paclitaxel. Geisler JP, Linnemeier GC, Thomas AJ, Manahan KJ
Gynecologic Oncology. 2007;106:538-540.

9. *In vitro* extreme drug resistance assay to taxanes and platinum compounds for the prediction of clinical outcomes in epithelial ovarian cancer: a prospective cohort study. Kim HS, Kim TJ, Chung HH, Kim JW, Kim BG, Park NH, Song YS, Bae DS, Kang SB
Journal of Cancer Research and Clinical Oncology. 2009 Nov;135(11):1513-20.

10. Low drug resistance to both platinum and taxane chemotherapy on an *in vitro* drug resistance assay predicts improved survival in patients with advanced epithelial ovarian, fallopian, and peritoneal cancer. Matsuo K, Bond VK, Eno ML, Im DD, Rosenshein NB
International Journal of Cancer. 2009 Dec 1;125(11):2721-7.

11. Chemotherapy time interval and development of platinum and taxane resistance in ovarian, fallopian, and peritoneal carcinoma. Matsuo K, Eno ML, Im DD, Rosenshein NB
Archives Gynecology and Obstetrics. 2010 Feb;281(2):325-8.

12. Survival among patients with platinum resistant, locally advanced non-small cell lung cancer treated with platinum-based therapy. d'Amato TA, Pettiford BL, Schuchert MJ, Parker RJ, Ricketts WA, Luketich JD, Landreneau RJ

Annals of Surgical Oncology. 2009 Oct;16(10):2848-55.

13. Efficacy of taxane and platinum-based chemotherapy guided by extreme drug resistance assay in patients with epithelial ovarian cancer. Joo WD, Lee JY, Kim JH, Yoo HJ, Roh HJ, Park J-Y, Kim D-Y, Kim Y-M, Kim Y-T, Nam J-H
J Gynecol Oncol**.** 2009 June;20(2):96-100.

14. Clinical relevance of extent of extreme drug resistance in epithelial ovarian carcinoma. Matsuo K, Eno ML, Im DD, Rosenshein NB, Sood AK.
Gynecol Oncol. 2010 Jan;116(1):61-5. Epub 2009 Oct 17.

15. Prediction of Chemotherapy Response With Platinum and Taxane in the Advanced Stage of Ovarian and Uterine Carcinosarcoma: A Clinical Implication of In vitro Drug Resistance Assay. Matsuo K, Bond VK, Im DD, Rosenshein NB.
Am J Clin Oncol. 2010 Aug;33(4):358-63.

16. Correlation of extreme drug resistant assay results and progression-free survival following intraperitoneal chemotherapy for advanced ovarian cancer. Pant AC, Diaz-Montes T, Tanner E, Ahmad S, Giuntoli RL, Holloway RW, Bristow RE.
J Chemother. 2010 Aug;22(4):270-4.

17. Extreme drug resistance for carboplatin predicts resistance to first line therapy in advanced stage ovarian cancer: results from the EORTC-GCG/NCIC-CTG neoadjuvant trial. Verleye L, Coens C, Amant F, van der Burg MEL, Johnson N, Verheijen R, Casado A, Reed NS, Parker RJ, Vergote I
Communication at the 12th Biennial meeting International Gynecologic Cancer Society IGCS, Bangkok, Thailand, October 25-28, 2008 (abs.).

18. Prediction of clinical response to drugs in ovarian cancer using the chemotherapy resistance test (CTR-test). Kischkel FC, Meyer C, Eich J, Nassir M, Mentze M, Braicu I, Kopp-Schneider A, Sehouli J.
J Ovarian Res. 2017 Oct 27;10(1):72. doi: 10.1186/s13048-017-0365-9.

Validierungsstudien

Nachfolgend finden sich Studien, bei denen der Test an Patientenproben validiert wurde.

1. Heterogeneity of drug resistance in human breast and ovarian cancers. Kern DH
Cancer J Sci Am. 1998 Jan-Feb;4(1):41-5.

2. Factors associated with success of the extreme drug resistance assay in primary breast cancer specimens. Ellis RJ, Fabian CJ, Kimler BF, Tawfik O, Mayo MS, Decelis CR, Jewell WR, Connor C, Modrell C, Praeger M, McGinness M, Mehta R, Fruehauf JP
Breast Cancer Res Treat. 2002 Jan;71(2):95-102.

3. Extreme drug resistance in primary brain tumors: in vitro analysis of 64 resection specimens. Haroun RI, Clatterbuck RE, Gibbons MC, Burger PC, Parker R, Fruehauf JP, Brem H
J Neurooncol. 2002 Jun;58(2):115-23.

4. In vitro chemoresistance and biomarker profiles are unique for histologic subtypes of epithelial ovarian cancer. Cloven NG, Kyshtoobayeva A, Burger RA, Yu IR, Fruehauf JP
Gynecol Oncol. 2004 Jan;92(1):160-6.

5. Conservation of in vitro drug resistance patterns in epithelial ovarian carcinoma. Tewari KS, Mehta RS, Burger RA, Yu IR, Kyshtoobayeva AS, Monk BJ, Manetta A, Berman ML, Disaia PJ, Fruehauf JP
Gynecol Oncol. 2005 Sep;98(3):360-8.

6. Prevalence of *in vitro* extreme chemotherapy resistance in resected non-small cell lung cancer.
d'Amato TA, Landreneau RJ, McKenna RJ, Santos, RS, Parker RJ
Annals of Thoracic Surgery, 2006, 81: 440-447.

7. Tumor heterogeneity in ovarian cancer as demonstrated by in vitro chemoresistance assays. McAlpine JN, Eisenkop SM, Spirtos NM.
Gynecol Oncol. 2008 Sep;110(3):360-4.

8. *In vitro* chemoresistance testing in well-differentiated carcinoid tumors. Lyons JM 3rd, Abergel J, Thomson JL, Anthony CT, Wang YZ, Anthony LB, Boudreaux JP, Strauchen J, Idrees M, Warner RR, Woltering EA
Ann Surg Oncol. 2009 Mar;16(3):649-55.

9. Prevalence of in vitro chemotherapeutic drug resistance in primary malignant pleural mesothelioma: result in a cohort of 203 resection specimens. Mujoomdar AA, Tilleman TR, Richards WG, Bueno R, Sugarbaker DJ
J Thorac Cardiovasc Surg. 2010 Aug;140(2):352-5.

10. In vitro drug responses in primary and metastatic colorectal cancers. Mechetner E, Brünner N, Parker RJ.
Scand J Gastroenterol. 2011 Jan;46(1):70-8.

11. New in vitro system to predict chemotherapeutic efficacy of drug combinations in fresh tumor samples. Kischkel FC, Eich J, Meyer CI, Weidemüller P, Krapfl J, Yassin-Kelepir R, Job L, Fraefel M, Braicu I, Kopp-Schneider A, Sehouli J, De Wilde RL.
PeerJ. 2017 Mar 2;5:e3030. doi: 10.7717/peerj.3030. eCollection 2017.