

Dr. Rath Research Institute – Scientific Publications

CANCER

- **PROSTATE CANCER**

Induction of apoptosis in the human prostate cancer cell line DU-145 by a novel micronutrient formulation

Roomi MW, Shanker N, Niedzwiecki A, Rath M

Open Journal of Apoptosis, 2015, 4: 11-21

Down-regulation of urokinase plasminogen activator and matrix metalloproteinases and up-regulation of their inhibitors by a novel nutrient mixture in human prostate cancer cell lines PC-3 and DU-145

Roomi MW, Kalinovsky T, Rath M, Niedzwiecki A

Oncology Reports 2011, 26: 1407-1413

In Vivo Antitumor Effect of Ascorbic Acid, Lysine, Proline and Green Tea Extract on Human Prostate PC-3 Xenografts in Nude Mice: Evaluation of Tumor Growth and Immunohistochemistry

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M

In Vivo 2005, 19(1), 179-184

Antitumor Effect of Ascorbic Acid, Lysine, Proline, Arginine and Epigallocatechin Gallate in Prostate Cancer Cell Lines PC-3, LNCaP, and DU145

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M

Research Communications in Molecular Pathology and Pharmacology, 2004, 115:1-6

- **TESTICULAR CANCER**

Inhibitory Effects of a Nutrient Mixture on Human Testicular Cancer cell Line NT 2/DT Matrigel Invasion and MMP Activity

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M

Medical Oncology 2007 24(2): 183-188

- **BREAST CANCER**

Unique Pattern of Intraperitoneal Inoculation of Murine Breast Cancer Cell Line 4T1 in Female BALB/c Mice: Invasion of Skeletal Muscle by Breast Cancer

M.W. Roomi, B. Bhanap, A. Niedzwiecki, M. Rath

Medical Research Archives, vol. 7, issue 11, November 2019

<https://doi.org/10.18103/mra.v7i11.1992>

Breast cancer cells damaged by chemotherapy accelerate tumor growth

Roomi MW, Niedzwiecki A, Rath M
J. of Cellular Medicine and Natural Health 2019, July

Chemotherapy docetaxel-derived tumor debris promotes growth of 4T1 breast cancer tumors in female nude mice by multiple mechanisms

Roomi MW, Niedzwiecki A, Rath M
J. of Cellular Medicine and Natural Health 2019, July

Vitamin D enhances anticancer effects of EGCG and a specific micronutrient combination in breast cancer cells

Ivanov V, Ivanova S, Niedzwiecki A, Rath M
J. Cellular Medicine and Natural Health 2019, June

Lipoprotein(a) and vitamin C impair development of breast cancer tumors in lp(a)+;gulo-/- mice

Cha J, Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M
International Journal of Oncology 2016, 49(3), 895-902

In vivo and in vitro effects of a nutrient mixture on breast 4T1 cancer progression

Roomi MW, Kalinovsky T, Roomi NW, J Cha, Rath M, Niedzwiecki A
International Journal of Oncology 2014, 44:1933-1944

Ascorbate supplementation inhibits growth and metastasis of B16FO melanoma and 4T1 breast cells in vitamin C deficient mice

Cha J, Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
International Journal of Oncology 2013 42:55-64

A combination of green tea extract, specific nutrient mixture and quercetin: An effective intervention treatment for the regression of N-Methyl –N-Nitrosourea (MNU)-Induced mammary tumors in Wistar rats.

Kale A, Gawande S, Kotwal S, Netke S, Roomi MW, Ivanov V, Niedzwiecki A, Rath M
Oncology Letters 2010, 1:313-317

In Vitro and In Vivo Antitumorigenic Activity of a Mixture of Lysine, Proline, Ascorbic Acid and Green Tea Extract on Human Breast Cancer Lines MDA MB-231 and MCF-7

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Medical Oncology 2005, 22(2) 129-38

Modulation of N-Methyl –N-Nitrosourea-Induced Mammary Tumors in Sprague-Dawley Rats by Combination of Lysine, Proline, Arginine, Ascorbic Acid and Green Tea Extract

Roomi MW, Roomi NW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Breast Cancer Research 2005, 7:R291-R295

- **CERVICAL, OVARIAN AND UTERINE CANCER**

A Nutrient Mixture Reduced Tumor Growth of SK-UT-1 Human Leiomyosarcoma Cells in vivo and in vitro by Inhibiting MMPs and Inducing Apoptosis

Roomi MW, Bhanap B, Niedzwiecki A, Rath M
Exp Oncol 2021 Experimental Oncology 2021; 43:3, 209–216

DOI: 10.32471/exp-oncology.2312-8852.vol-43-no-3.16604

A Novel Nutrient Mixture Induces Apoptosis in Human Ovarian and Cervical Cancer Cells

Roomi MW, Bhanap B, Niedzwiecki A, Rath M

J Cervical Cancer Res 2018, 2(1):10-17

A specific mixture of nutrients suppresses ovarian cancer a-2780 tumor incidence, growth, and metastasis to lungs

Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M

Nutrients 2017, 9: 303-314

A nutrient mixture modulates ovarian ES-2 cancer progression by inhibiting xenograft tumor growth and cellular MMP secretion, migration and invasion

Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M

International Journal of Clinical and Experimental Medicine 2016, 9(2):814-822

Effect of nutrient mixture on the localization of extracellular matrix proteins in HeLa human cervical cancer xenografts in female nude mice

Roomi MW, Cha J, Kalinovsky T, Roomi NW, Niedzwiecki A, Rath M

Journal of Experimental & Therapeutic Medicine 2015, 10: 901-906

Effect of NM on Immunohistochemical cancer markers in human cervical cancer HeLa cell tumor xenograft in female nude mice

Roomi MW, Kalinovsky T, Cha J, Roomi NW, Niedzwiecki A, Rath M

Journal of Experimental & Therapeutic Medicine 2015, 9: 294-302

Modulation of u-PA, MMPs and their inhibitors by a novel nutrient mixture in human female cancer cell lines

Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M

Oncology Reports 2012, 28:768-776

Anticancer effects of a specific mixture of nutrients in the multidrug-resistant human uterine sarcoma MES-SA/Dx5 and the drug-sensitive MES-SA cell lines

Roomi MW, Kalinovsky T, Roomi NM, Rath M, Niedzwiecki A

Oncology Reports 2011, 27: 17-27.

Suppression of Human Cervical Cancer Cell Lines Hela and DoTc2 4510 MMP Expression and Matrigel Invasion by a Mixture of Lysine, Proline, Ascorbic Acid, and Green Tea Extract

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M

International Journal of Gynecological Cancer 2006; 16:1241-1247

In vitro modulation of MMP-2 and MMP-9 in human cervical and ovarian cancer cell lines by cytokines, inducers and inhibitors

Roomi MW, Monterrey JC, Kalinovsky T, Rath M, Niedzwiecki A

Oncology Reports 2010; 23(3):605-614

Inhibition of MMP-2 Secretion and Invasion by Human Ovarian Cancer Cell Line SK-OV-3 with lysine, proline, arginine, ascorbic acid, and Green Tea Extract

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M

Journal of Obstetrics and Gynecology Research 2006; 32(2): 148-154.

- **GASTROINTESTINAL CANCER**

In Vitro Effect of Cytokines, Inducers, and Inhibitors on the Secretion of MMP-2 and MMP-9 in Hepatocarcinoma Cell Line SK-Hep-1

Roomi MW, Kalinovsky T, Bhanap B, Niedzwiecki A, Rath M

Integrative Cancer Therapies Volume 18: 1–12, 2019 DOI: 10.1177/1534735419889155

Antitumor effect of a nutrient mixture on colon cancer cells

Roomi MW, Bhanap B, Niedzwiecki A, Rath M

Journal of Cellular Medicine and Natural Health, July 2019

Modulation of uPA, MMPs and their inhibitors by a novel nutrient mixture in human colorectal, pancreatic and hepatic carcinoma cell lines

Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M

International Journal of Oncology 2015; 47(1): 370-376

Micronutrient synergy in the fight against hepatocellular carcinoma

Roomi MW, Roomi NW, Kalinovsky T, Niedzwiecki A, Rath M

Cancers 2012; 4(2):323-339

In vivo and in vitro effect of a nutrient mixture on human hepatocarcinoma cell line SK-Hep-1

Roomi MW, Roomi NM, Kalinovsky T, Niedzwiecki A, Rath M

Experimental Oncology 2010; 32:84-91.

Antitumor Effect of a Combination of Lysine, Proline, Arginine, Ascorbic Acid, and Green Tea Extract on Pancreatic Cancer Cell Line MIA PaCa-2

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M

International Journal of Gastrointestinal Cancer 2005; 35 (2), 97-102

In Vivo Antitumor Effect of Ascorbic Acid, Lysine, Proline and Green Teat Extract on Human Colon Cancer Cell HCT 116 Xenografts in Nude Mice: Evaluation of Tumor Growth and Immunohistochemistry

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M

Oncology Reports 2005; 12 (3), 421-425

Synergistic Effect of Combination of Lysine, Proline, Arginine, Ascorbic Acid and Epigallocatechin Gallate on Colon Cancer Cell Line HCT 116

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M

Journal of the American Nutraceutical Association 2004; 7 (2): 40-43

- **BONE CANCER**

Anti-cancer potential of a specific mixture of phytonutrients in bone cancer cells

Roomi MW, Bhanap B, Niedzwiecki A, Rath M

Journal of Cellular Medicine and Natural Health; 2017 Oct

Naturally Produced Extracellular Matrix Inhibits Growth Rate and Invasiveness of Human Osteosarcoma Cancer Cells

Ivanov V, Ivanova S, Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M
Medical Oncology 2007; 24(2): 209-217.

Effect of Ascorbic Acid, Lysine, Proline and Green Tea Extract on Human Osteosarcoma Cell Line MNNG-HOS Xenografts in Nude Mice: Evaluation of Tumor Growth and Immunohistochemistry
 Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Medical Oncology 2006; 23(3): 411-417.

Antitumor Effect of Nutrient Synergy on Human Osteosarcoma Cells U2OS, MNNG-HOS, and Ewing's Sarcoma SK-ES.1
 Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Oncology Reports 2005; 13(2), 253-257

In Vivo and In Vitro Antitumor Effect of Nutrient Synergy on Human Osteosarcoma Cell Line MNNG-HOS
 Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Annals of Cancer Research and Therapy 2004; 12: 137-148

- **SARCOMA**

A Nutrient Mixture Induces Caspase Dependent Apoptosis in Human Synovial Sarcoma Cells
 Roomi MW, Bhanap B, Ahmed T, Niedzwiecki A, Rath M
J Sarcoma Res. 2018; 2(1): 1010

Chlorophyllin Suppresses Growth, MMP Secretion, Invasion and Cell Migration of Fibrosarcoma Cell Line HT-1080
 M W Roomi, B Bhanap, A Niedzwiecki, M Rath
Medical Research Archives 2018 vol 6(12)

A specific mixture of phytonutrients inhibits cell proliferation, secretion of MMPs and invasion through Matrigel in fibrosarcoma HT-1080 and melanoma A-2058 cells.
 Roomi MW, Kalinovsky T, Jariwalla N, Siddiqui S, Niedzwiecki A, Rath M
J. Cellular Medicine & Natural Health 2017, March

Apoptosis of Human Fibrosarcoma Cells HT-1080 Triggered by a Novel Nutrient Mixture via Induction of Caspases
 Roomi MW, Bhanap B, Niedzwiecki A, Rath M
Sarcoma Res Int. 2016; 3(3): 1036

Modulation of u-PA, MMPs and their inhibitors by a novel nutrient mixture in adult human sarcoma cell lines
 Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M
International Journal of Oncology. 2013; 43: 39-49

Modulation of u-PA, MMPs and their inhibitors by a novel nutrient mixture in pediatric human sarcoma cell lines
 Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M
International Journal of Oncology. 2013; 43: 1027-1035

In vitro modulation of MMP-2 and MMP-9 in pediatric human sarcoma cell lines by cytokines, inducers and inhibitors

Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M
International Journal of Oncology. 2013; 44: 27-34

In vitro modulation of MMP-2 and MMP-9 in adult human sarcoma cell lines by cytokines

Roomi MW, Kalinovsky T, Monterrey J, , Rath M, Niedzwiecki A
International Journal of Oncology 2013; 43: 1787-1798

The Anti-Cancer Effect of a Novel Nutrient Mixture by Inhibiting MMPs Expression, Invasion and Inducing Apoptosis in Chondrosarcoma Cell Line SW-1353;

Roomi MW, Roomi NW, Bhanap B, Niedzwiecki A, Rath M
Cancer and Clinical Oncology 2012; Vol. 1, No. 2

Inhibitory of Cell Invasion and MMP Production by a Nutrient Mixture in Malignant Liposarcoma Cell Line SW-872

MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Medical Oncology 2007; 24(4):394-401.

In Vitro Anticarcinogenic Effect of a Nutrient Mixture on Human Rhabdomyosarcoma Cells

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Gene Therapy and Molecular Biology 2007; 11(B):133-144

In Vivo and in Vitro Anti-tumor Effect of a Nutrient Mixture Containing Ascorbic Acid, Lysine, Proline, and Green Tea Extract on Human Synovial Sarcoma Cancer Cells

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
JANA 2006; 9(2): 30-34.

In Vivo and in Vitro Antitumor Effect of Ascorbic Acid, Lysine, Proline, Arginine, and Green Tea Extract on Human Fibrosarcoma Cells HT-1080

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Medical Oncology 2006; 23(1): 105-112

Synergistic Antitumor Effect of Ascorbic Acid, Lysine, Proline, and Epigallocatechin Gallate on Human Fibrosarcoma Cells HT-1080

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Annals of Cancer Research and Therapy 2004; 12:148-157

- **KIDNEY AND BLADDER CANCER**

Inhibition of tumor growth and metastasis by a novel nutrient mixture of inoculation of mouse mammary 4T1 carcinoma in kidney of female Balb/c mice

Roomi MW, Bhanap B, Niedzwiecki A, Rath M
J. Cellular Medicine and Natural Health 2018, June

Programmed Cell Death in Renal Cancer Cell 786-0 by a Novel Nutrient Mixture by Down Regulating u-PA, MMPs, and Up Regulating TIMPs

Roomi MW, Bhanap B, Niedzwiecki A, Rath M

Apoptosis (Open Access e-book) ISBN: 978-93-86337-72-6; Publisher: Avid Science In Press: 2018
(<http://www.avidscience.com/book/apoptosis/>)

Pleiotropic effects of a micronutrient mixture on critical parameters of bladder cancer Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M
In **Bladder Cancer: Etymology, Diagnosis and Treatments**, edited by William Nilsson, Nova Science Publishers, Inc., 2010, pp. 229-243

Antitumor Effect of Ascorbic Acid, Lysine, Proline, Arginine, and Green Tea Extract on Bladder Cancer Cell Line T-24

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
International Journal of Urology 2006; 13: 415-419

Modulation of Human Renal Cell Carcinoma 786-0 MMP-2 and MMP-9 Activity by Inhibitors and Inducers in Vitro

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Medical Oncology 2006; 23(2): 245-250.

Anticancer Effect of Lysine, Proline, Arginine, Ascorbic Acid and Green Tea Extract on Human Renal Adenocarcinoma Line 786-0

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Oncology Reports 2006; 16(5):943-7

- **SKIN CANCER**

Metastatic failure of B16FO melanoma cells inoculated in different and non-typical organs of athymic male nude mice and female C57BL6 mice

Roomi MW, Bhanap B, Ahmed T, Niedzwiecki A, Rath M
Medical Research Archives vol 8 (6). June 2020

Phytonutrients inhibit fibrosarcoma and melanoma cell growth and invasion

Roomi MW, Kalinovsky T, Jariwalla N, Siddiqui S, Niedzwiecki A, Rath M
J. Cellular Medicine and Natural Health; 2017, March

Progress of Tumor Growth and Metastasis after Inoculation of B16FO Melanoma Cells in Kidney of Female Nude Mice Is Inhibited by a Novel Nutrient Mixture

Roomi MW, Bhanap B, Niedzwiecki A, Rath M
Integrative Cancer Therapies Volume 18: 1–8, 2019 DOI: 10.1177/1534735419832365

Modulation of MMP-2 and -9 secretion by cytokines, inducers and inhibitors in human melanoma A-2058 cells.

Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M.
Oncol Rep. 2017 Jun;37(6):3681-3687. Epub 2017 Apr 24.

Suppression of metastasis of intratesticular inoculation of B16FO melanoma cells by a novel nutrient mixture in male athymic nude

Roomi MW, Kalinovsky T, Roomi NW, Rath M, Niedzwiecki A
Experimental and Therapeutic Medicine 2012;4:775-780

Ascorbate depletion increases growth and metastasis of melanoma cells in Vitamin C deficient mice

Cha J, Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M

*Experimental Oncology 2011; 33(4):1-5***Inhibition of 7, 12-Dimethylbenzathracene-Induced Skin tumors by a Nutrient Mixture**

Roomi MW, Roomi NW, Kalinovsky T, Ivanov V, Rath M, Niedzwiecki A

*Medical Oncology 2008; 25(3): 330-340.***Suppression of growth and hepatic metastasis of murine B16FO melanoma cells by a novel nutrient mixture**

Roomi MW, Kalinovsky T, Roomi NW, Ivanov V, Rath M, Niedzwiecki A

*Oncology Reports 2008; 20:809-817.***In Vitro and In Vivo Antitumor Effect of Ascorbic Acid, Lysine, Proline, And Green Tea Extract On Human Melanoma Cell Line A2058**

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M

In Vivo 2006; 20(1):25-32.

- **LUNG CANCER**

A Novel Nutrient Mixture Induces Apoptosis in Human Mesothelioma Cells (MSTO-211H) via Activation of Caspases.

Roomi MW, Bhanap B, Niedzwiecki A, Rath M

*Glob J Cancer Ther, 2019, 5(1): 007-011.***Induction of Apoptosis in Human Lung Cancer Cells (A549) by a Novel Nutrient Mixture via Upregulation of Caspase Enzymes**

Roomi MW, Bhanap B, Ahmed T, Niedzwiecki A, Rath M

*Austin J Lung Cancer Res. 2018; 3(1): 1013.***Modulation of u-PA, MMPs and their inhibitors by a novel nutrient mixture in human lung cancer and mesothelioma cell lines**

Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M

*International Journal of Oncology 2013; 42:1883-1889***Chemopreventive effect of a novel nutrient mixture on lung tumorigenesis induced by urethane in male A/J mice**

Roomi MW, Roomi NW, Kalinovsky T, Rath M, Niedzwiecki A

*Tumori 2009; 95: 508-513***Modulation of MMP-2 and MMP-9 by cytokines, mitogens, and inhibitors in lung cancer and mesothelioma cell lines**

Roomi MW, Monterrey JC, Kalinovsky T, Rath M, Niedzwiecki A

*Oncology Reports 2009; 22: 1283-1291***Inhibition of Malignant Mesothelioma Cell Matrix Metalloproteinase Production and Invasion by a Novel Nutrient mixture**

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Experimental Lung Research 2006; 32:69-79.

In Vivo and in Vitro Anti-tumor Effect of a Unique Nutrient Mixture on Lung Cancer Cell Line A-549
 Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M
Experimental Lung Research 2006; 32:441-453

- **BLOOD CANCER**

Down regulation of u-pa by a nutrient mixture in hemangioma (EOMA) cells by inducing Caspase-dependent apoptosis

Roomi MW, Bhanap B, Niedzwiecki A, Rath M
Experimental Oncology 40, 90–94, 2018, June

Cytokines, inducers and inhibitors modulate MMP-2 and MMP-9 secretion by human Fanconi anemia immortalized fibroblasts.

Roomi MW, Kalinovsky T, Rath M, Niedzwiecki A.
Oncol Rep. 2017 Mar;37(3):1842-1848. Epub 2017 Jan 16.

Effect of a nutrient mixture on Fanconi anemia fibroblast and normal human dermal fibroblast: a comparison

Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M
Open Journal of Apoptosis 5:2-8, 2016

Specific nutrient combination effects on tax, NF-kB and MMP-9 in human T-cell lymphotropic virus-1 positive malignant T-lymphocytes

Harakeh S, Azar R, Azhar E, Damanhoury GA, Assidi M, Abu-Elmagd M, Alqahtani MH, Kumosani T, Niedzwiecki A, Rath M,, Al-Hejin A, Barbour E, Diab-Assaf M
BMC Cancer 2015, 15(Suppl 1):S2 (15 January 2015)

Epigallocatechin-3-gallate Inhibits Tax-dependent Activation of Nuclear Factor Kappa B and of Matrix Metalloproteinase 9 in Human T-cell Lymphotropic Virus-1 Positive Leukemia Cells

Harakeh S, Diab-Assaf M, Azar R, Hassan HM, Tayeb S, Abou-El-Ardat K, Damanhoury GA, Qadri I, Abuzenadah A, Chaudhary A, Kumosani T, Niedzwiecki A, Rath M, Yacoub H, Azhar E, Barbour E.
Asian Pac J Cancer Prev, 2014;15 (3), 1219-1225,

Effects of nutrients on matrix metalloproteinases in human T lymphotropic virus type 1-positive and -negative malignant T lymphocytes

Harakeh S, Abou-Khouzam R, Damanhoury GA, Al-Hejin A, Kumosani T, Niedzwiecki A, Rath M, Barbour E, Diab-Assaf M, Azar R
Int J Oncol, 2014, 45 (5); 2159-2166

In vitro inhibition of matrix metalloproteinases, invasion and growth of Fanconi anemia human FANCA and FANCC lymphoblasts by nutrient mixture.

Roomi MW, Bhanap B, Roomi NW, Niedzwiecki A, Rath M.
*Exp Oncol.*2014;36(3):212-4.

Repression of matrix metalloproteinases and inhibition of cell invasion by a nutrient mixture, containing ascorbic acid, lysine, proline, and green tea extract on human Fanconi anemia fibroblast cell lines

Roomi MW, Roomi NW, Bhanap B, Niedzwiecki A, Rath M
Exp Oncol. 2013; 35(1):20-24.

Inhibition of growth and expression of inflammation mediators in human leukemic cell line u-937 by a nutrient mixture

Roomi MW, Kalinovsky T, Roomi NW, Rath M, Niedzwiecki A
Experimental Oncology 2013; 35(3):180-186

In vitro and in vivo inhibition of human Fanconi anemia head and neck squamous carcinoma by a novel nutrient mixture

Roomi MW, Kalinovsky T, Roomi NW, Niedzwiecki A, Rath M
International Journal of Oncology.2012; 41(6), 1996-2004

Nutrient Mixture Inhibits in vitro and in vivo Growth of Human Acute Promyelocytic Leukemia HL-60 Cells

Roomi MW, Roomi NW, Bhanap B, Niedzwiecki A, Rath
Exp Oncol. 2011;33(4):212-215

In vivo and in vitro antitumor effects of nutrient mixture in murine leukemia cell line P-388;

Roomi MW, Roomi NW, Bhanap B, Rath M, Niedzwiecki A
Exp Oncol. 2011; 33(2):71-7.

Antineoplastic effect of nutrient mixture on Raji and Jurkat T cells: the two highly aggressive non Hodgkin's lymphoma cell lines

Roomi MW, Bhanap BA, Roomi NW, Niedzwiecki A, Rath M
Experimental Oncology 2009; 31(3): 149-155.

Epigallocatechin -3-Gallate induces apoptosis and cell cycle arrest in HTLV-1 positive and negative leukemia cells

Harakeh S, Abu-El-Ardat K, Diab-Assaf M, Niedzwiecki A, El-Sabban M, Rath M.
Medical Oncology 2008; 25: 30-39

Ascorbic acid induces apoptosis in Adult T-cell Leukemia

Harakeh S1, Diab-Assaf M, Khalife JC, Abu-el-Ardat KA, Baydoun E, Niedzwiecki A, El-Sabban ME, Rath M
Anticancer Research 2007; 27: 289-298

Mechanistic aspects of apoptosis induction by L-Lysine in both HTLV-1 positive and negative cell lines

Harakeh S, Diab-Assaf M, Abu-El-Ardat K, Niedzwiecki A, Rath M
Chem. Biol. Interactions 2006; 164: 102-114

Apoptosis Induction by Epican Forte in HTLV-1 Positive and Negative Malignant T-Cells

Harakeh S, Diab-Assaf M, Niedzwiecki A, Khalife J, Abu-El-Ardat K, Rath M.
Leukemia Research 2006; 30: 869-881

- **HEAD AND NECK CANCER**

In Vitro Modulation of MMP-2 and MMP-9 Secretion by Cytokines, Inducers, and Inhibitors in Head and Neck Squamous Carcinoma Cells (FaDu) and Tongue Carcinoma Cells (SCC-25)

Roomi MW, Bhanap B, Niedzwiecki A, Rath M

J Otolaryngol Rhinol 2017, 3:029; Vol 3 | Issue 1

Nutrient Synergy: A Novel Approach To Head And Neck Cancer (Chapter 1)

Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M

Head and Neck Cancer (Open Access e-book) Publisher: Avid Science, Jan 2017

(<http://www.avidscience.com/book/head-and-neck-cancer/>)

Modulation of MMP-2 and MMP-9 secretion by cytokines, inducers and inhibitors in human glioblastoma T-98G cells

Roomi MW, Kalinovsky T, Rath M, Niedzwiecki A

Oncology Reports 2017; DOI: 10.3892/or.2017.5391

A nutrient mixture inhibits glioblastoma xenograft U-87 MG growth in male nude mice

Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M

Experimental Oncology 2016, 38(1):1-3

Modulation of u-PA, MMPs and their inhibitors by a novel nutrient mixture in human glioblastoma cell lines

Roomi MW, Kalinovsky T, Niedzwiecki A, Rath M

International Journal of Oncology 2014, 45:887-894

Antineoplastic activity of a nutrient mixture in Y-79 malignant retinoblastoma cells Roomi MW,

Roomi N, Bhanap B, Niedzwiecki A, Rath M.

Oncol Rep. 2013; 29(1):29-33

Inhibition of human neuroblastoma cell line SK-N-MC in vivo and in vitro by a novel nutrient mixture

Roomi MW, Kalinovsky T, Roomi NW, Niedzwiecki A, Rath M

Oncology Reports 2013; 29:1714-1720

A Nutrient Mixture Inhibits MMP Secretion, Invasion, Growth, and Induction of Apoptosis in Human Tongue Cancer Cell Line SC-255.

Roomi MW, Roomi NW, Bhanap B, Niedzwiecki A, Rath M

OJApo 2013; 2(4); 37-44

Marked inhibition of growth and invasive parameters of head and neck squamous carcinoma FADU by a nutrient mixture

Roomi MW, Roomi N, Kalinovsky T, Rath M, Niedzwiecki A

Integrative Cancer Therapies 2009; 8(2):168-176

Inhibitory Effects of a Novel Nutrient Mixture on MMP Secretion and Invasion on Human Thyroid Cancer Cell Line SW 579;

Roomi MW, Bhanap B, Ivanov V, Niedzwiecki A, Rath M

JANA 2009; 12, (1), 26-34

Inhibition of Glioma Cell Line A-172 MMP Activity and Cell Invasion in Vitro by a Nutrient Mixture

Roomi MW, Ivanov V, Kalinovsky T, Niedzwiecki A, Rath M

Medical Oncology 2007; 24(2): 231-238.

- **OTHER ASPECTS OF CANCER**

Expanding Metabolic Targets in Cancer by Select Combinations of Vitamin C and EGCG with Different Natural Compounds

Niedzwiecki A., Bhanap B., Roomi MW, Rath M.

In: Gupta R., Srivastava A., Lall R. (eds) Nutraceuticals in Veterinary Medicine. pp 611-624 2019, Springer, Cham

Scientific Evaluation of Dietary Factors in Cancer.

Roomi MW, Niedzwiecki A, Rath M

J Nutri Med Diet Care, 2018 4:029. doi.org/10.23937/2572-3278.1510029

Anticancer efficacy of polyphenols and their combinations

A Niedzwiecki, MW Roomi, T Kalinovsky, M Rath

Nutrients 2016; 8 (9), 552

Nutraceuticals in cancer prevention

Roomi MW, Kalinovsky T, Rath M, Niedzwiecki A

Nutraceuticals – Efficacy, Safety and Toxicity, ed. R.C. Gupta, Elsevier 2016, pp 135-144

A Specific Combination of Ascorbic Acid, Lysine, Proline and Epigallocatechin Gallate Inhibits Proliferation and Extracellular Matrix Invasion of Various Human Cancer Cell Lines,

Netke SP, Roomi MW, Ivanov V, Niedzwiecki A, Rath M

Research

Communications in Pharmacology and Toxicology, Emerging Drugs, 2003; Vol. II, IV37-IV50.

- **MATRIX METALLOPROTEINASES (MMPs)**

Immunological targeting of matrix metalloproteinase-9 as a novel approach to universal cancer vaccine: characterization of anti-cancer antibodies efficacy in vitro

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- **METASTASIS**

Micronutrient synergy – a new tool in effective control of metastasis and other key mechanisms of cancer

Niedzwiecki A, Roomi MW, Kalinovsky T, Rath M
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A nutrient mixture suppresses hepatic metastasis in athymic nude mice injected with murine B16FO melanoma cells

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Inhibition of Pulmonary Metastasis of Melanoma B16FO Cells in C57BL/6 Mice by a Nutrient Mixture Consisting of Ascorbic Acid, Lysine, Proline, Arginine, and Green Tea Extract

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- **ANGIOGENESIS**

Antiangiogenic properties of a nutrient mixture in a model of hemangioma

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