

# *Critical Reviews<sup>TM</sup> in Oncogenesis*

## VOLUME 19 CONTENTS, 2014

---

Page Range of Issues: Issues 1-2: 1-141; Issues 3-4: 143-315;  
Issue 5: 317-404; Issue 6: 405-516

---

### ISSUES 1-2

**Special Issue: Natural Killer Cells in Cancer: Surveillance, Progression, and Therapy**  
Guest Editors: James E. Talmadge & Theresa L. Whiteside

<b>Natural Killer Activity: Early Days, Advances, and Seminal Observations</b> <i>J.R. Ortaldo, R.H. Wiltrot, &amp; C.W. Reynolds</i>	<b>1</b>
<b>Serendipity. Coincidence. Luck.</b> <i>R. Kiessling</i>	<b>15</b>
<b>NK Cell Phenotypic and Functional Heterogeneities and Molecular Mechanisms of Cytotoxicity</b> <i>B. Bonavida</i>	<b>21</b>
<b>Measurements of Natural Killer (NK) Cells</b> <i>L.H. Butterfield &amp; T.L. Whiteside</i>	<b>47</b>
<b>Positive and Negative Regulation by NK Cells in Cancer</b> <i>C.M. Sungur &amp; W.J. Murphy</i>	<b>57</b>
<b>Dendritic Cell Editing by Natural Killer Cells</b> <i>G. Ferlazzo &amp; L. Moretta</i>	<b>67</b>
<b>The Pathophysiological Role of Chemokines in the Regulation of NK Cell Tissue Homing</b> <i>G. Bernardini &amp; A. Santoni</i>	<b>77</b>
<b>NK Cells in the Tumor Microenvironment</b> <i>S.K. Larsen, Y. Gao, &amp; P.H. Basse</i>	<b>91</b>
<b>NK Cells and Virus-Related Cancers</b> <i>R. Mishra, R.M. Welsh, &amp; E. Szomolanyi-Tsuda</i>	<b>107</b>
<b>Clinical Grade Purification and Expansion of Natural Killer Cells</b> <i>N. Lapteva, S.M. Szmania, F. van Rhee, &amp; C.M. Rooney</i>	<b>121</b>
<b>NK Cells in Therapy of Cancer</b> <i>V. Bachanova &amp; J.S. Miller</i>	<b>133</b>

---

### ISSUES 3-4

**Special Issue: Nanotechnology in Imaging and Cancer Therapy**  
Guest Editors: Adriana Haimovitz-Friedman

<b>Dawn of Advanced Molecular Medicine: Nanotechnological Advancements in Cancer Imaging and Therapy</b> <i>C. Kaittanis, T.M. Shaffer, D.L.J. Thorek, &amp; J. Grimm</i>	<b>143</b>
<b>Liposome-Based Approaches for Delivery of Mainstream Chemotherapeutics: Preparation Methods, Liposome Designs, Therapeutic Efficacy</b> <i>M. Sempkowski, T. Locke, S. Stras, C. Zhu, &amp; S. Sofou</i>	<b>177</b>
<b>Nanoparticle Drug Formulations for Cancer Diagnosis and Treatment</b> <i>W. Poon, X. Zhang, &amp; J. Nadeau</i>	<b>223</b>
<b>Progress in Lipid-Based Nanoparticles for Cancer Therapy</b> <i>S. Grinberg, C. Linder, &amp; E. Heldman</i>	<b>247</b>
<b>Fibrillous Carbon Nanotube: An Unexpected Journey</b> <i>M.R. McDevitt &amp; D.A. Scheinberg</i>	<b>261</b>
<b>Exploiting the Tumor Phenotype Using Biodegradable Submicron Carriers of Chemotherapeutic Drugs</b> <i>S.M. Geary &amp; A.K. Salem</i>	<b>269</b>

---

**ISSUE 5**

**Special Issue: Stem Cells and Oncogenesis**  
**Guest Editor: Ittai Ben-Porath**

<b>Deciphering Tumor Growth by Clonal Analysis</b> <i>G. Driessens</i>	<b>317</b>
<b>Glioblastoma Heterogeneity and Cancer Cell Plasticity</b> <i>D. Friedmann-Morvinski</i>	<b>327</b>
<b>Evolving Views of Breast Cancer Stem Cells and Their Different States</b> <i>R. Condiotti, W. Guo, &amp; I. Ben-Porath</i>	<b>337</b>
<b>The EMT Universe: Space between Cancer Cell Dissemination and Metastasis Initiation</b> <i>L. Ombrato &amp; I. Malanchi</i>	<b>349</b>
<b>Tracking Down the Origin of Cancer: Metabolic Reprogramming as a Driver of Stemness and Tumorigenesis</b> <i>C. Sebastián</i>	<b>363</b>
<b>The Role of the Lkb1/AMPK Pathway in Hematopoietic Stem Cells and Leukemia</b> <i>Y. Saito &amp; D. Nakada</i>	<b>383</b>
<b>Friend or Foe: Can Activating Mutations in NOTCH1 Contribute to a Favorable Treatment Outcome in Patients with T-ALL?</b> <i>A. Goldshtain &amp; M. Berger</i>	<b>399</b>

---

**ISSUE 6**

**Special Issue: RKIP and Oncogenesis**  
**Guest Editor: Marsha R. Rosner**

<b>Regulation of the MAPK Pathway by Raf Kinase Inhibitory Protein</b> <i>D. Vandamme, A. Herrero, F. Al-Mulla, &amp; W. Kolch</i>	<b>405</b>
<b>Genetic and Epigenetic Control of RKIP Transcription</b> <i>I. Datar, H. Tegegne, K. Qin, F. Al-Mulla, M.S. Bitar, R.J. Trumbly, &amp; K.C. Yeung</i>	<b>417</b>
<b>RKIP-Mediated Chemo-Immunosensitization of Resistant Cancer Cells via Disruption of the NF-κB/Snail/YY1/RKIP Resistance-Driver Loop</b> <i>B. Bonavida</i>	<b>431</b>
<b>Raf Kinase Inhibitory Protein (RKIP) as a Metastasis Suppressor: Regulation of Signaling Networks in Cancer</b> <i>A.E. Yesilkanal &amp; M.R. Rosner</i>	<b>447</b>
<b>Survey of Raf Kinase Inhibitor Protein (RKIP) in Multiple Cancer Types</b> <i>K. Lamiman, J.M. Keller, A. Mizokami, J. Zhang, &amp; E.T. Keller</i>	<b>455</b>
<b>Role of Raf Kinase Inhibitor Protein in <i>Helicobacter pylori</i>-Mediated Signaling in Gastric Cancer</b> <i>L. Nisimova, S. Wen, S. Cross-Knorr, A.B. Rogers, S.F. Moss, &amp; D. Chatterjee</i>	<b>469</b>
<b>RKIP Structure Drives Its Function: A Three-State Model for Regulation of RKIP</b> <i>J.J. Skinner &amp; M.R. Rosner</i>	<b>483</b>
<b>RKIP: A Governor of Intracellular Signaling</b> <i>K. Lorenz, E. Schmid, &amp; K. Deiss</i>	<b>489</b>
<b>Interactions of RKIP with Inflammatory Signaling Pathways</b> <i>J. Zhao &amp; S. Wenzel</i>	<b>497</b>
<b>Raf Kinase Inhibitory Protein (RKIP): Functional Pleiotropy in the Mammalian Brain</b> <i>H.H. Ling, L. Mendoza-Viveros, N. Mehta, &amp; H.-Y.M. Cheng</i>	<b>505</b>

# *Critical Reviews<sup>TM</sup> in Oncogenesis*

## VOLUME 19 AUTHOR INDEX, 2014

---

Page Range of Issues: Issue 1-2: 1-141; Issues 3-4: 143-315;  
Issue 5: 317-404; Issue 6: 405-516

---

- |                              |                          |                           |
|------------------------------|--------------------------|---------------------------|
| Al-Mulla, F., 406, 417       | Keller, E.T., 455        | Rosner, M.R., 447, 483    |
| Bachanova, V., 133           | Keller, J.M., 455        | Saito, Y., 383            |
| Basse, P.H., 91              | Kiessling, R., 15        | Salem, A.K., 269          |
| Ben-Porath, I., 337          | Kolch, W., 405           | Santoni, A., 77           |
| Berger, M., 399              | Lamiman, K., 455         | Scheinberg, D.A., 261     |
| Bergkvist, M., 281           | Lapteva, N., 121         | Schmid, E., 489           |
| Bernardini, G., 77           | Larsen, S.K., 91         | Sebastián, C., 363        |
| Bitar, M.S., 417             | Linder, C., 247          | Sempkowski, M., 177       |
| Bonavida, B., 21, 431        | Ling, H.H., 505          | Shaffer, T.M., 143        |
| Butterfield, L.H., 47        | Locke, T., 177           | Skinner, J.J., 483        |
| Chatterjee, D., 469          | Lorenz, K., 489          | Sofou, S., 177            |
| Cheng, H.Y.M., 505           | Malanchi, I., 349        | Stras, S., 177            |
| Condiotti, R., 337           | McDevitt, M.R., 261      | Sungur, C.M., 57          |
| Cross-Knorr, S., 469         | Mehta, N., 505           | Szmania, S.M., 121        |
| Datar, I., 417               | Mendoza-Viveros, L., 505 | Szomolanyi-Tsuda, E., 107 |
| Deiss, K., 489               | Miller, J.S., 133        | Tegegne, H., 417          |
| Driessens, G., 317           | Mishra, R., 107          | Thorek, D.L.J., 143       |
| Engelberth, S.A., 281        | Mizokami, A., 455        | Trumbly, R.J., 417        |
| Ferlazzo, G., 67             | Moretta, L., 67          | Vandamme, D., 405         |
| Friedmann-Morvinski, D., 327 | Moss, S.F., 469          | van Rhee, F., 121         |
| Gao, Y., 91                  | Murphy, W.J., 57         | Welsh, R.M., 107          |
| Geary, S.M., 269             | Nadeau, J., 223          | Wen, S., 469              |
| Goldstein, A., 399           | Nakada, D., 383          | Wenzel, S., 497           |
| Grimm, J., 143               | Nisimova, L., 469        | Whiteside, T.L., 47       |
| Grinberg, S., 247            | Ombrato, L., 349         | Wiltrot, R.H., 1          |
| Guo, W., 337                 | Ortaldo, J.R., 1         | Yesilkanal, A.E., 447     |
| Heldman, E., 247             | Poon, W., 223            | Yeung, K.C., 417          |
| Hempel, N., 281              | Qin, K., 417             | Zhang, J., 455            |
| Herrero, A., 405             | Reynolds, C.W., 1        | Zhang, X., 223            |
| Kaittanis, C., 143           | Rogers, A.B., 469        | Zhao, J., 497             |
|                              | Rooney, C.M., 121        | Zhu, C., 177              |

*Critical Reviews™ in Oncogenesis*  
VOLUME 19 SUBJECT INDEX, 2014

Page Range of Issues: Issue 1-2: 1-141; Issues 3-4: 143-315;  
Issue 5: 317-404; Issue 6: 405-516

- 15-lipoxygenase-1, 497  
adoptive transfer, 121, 133  
allogeneic NK cells, 133  
allostery, 483  
Alzheimer's disease, 505  
AMP-activated protein kinase (AMPK), 383  
anti-tumor effect., 91  
asthma, 497  
breast cancer, 337, 447  
BTB and CNC homology 1, (BACH-1), 447  
cancer, 107, 133, 223, 505  
cancer immunoevasion, 57  
cancer immunotherapy, 57, 67  
cancer metabolism, 363  
cancer stem cells, 317, 327, 337, 363  
carbon nanotube, 261  
cell activation, 67  
cell interactions, 67  
cell of origin, 327, 363  
characterization, 1  
Chemokines, 77  
chemotherapy, 143, 177, 269, 431  
circadian rhythms, 505  
clinical products, 121  
clinical trials, 281  
clonal analysis, 317  
controlled drug release, 247  
cytokines, 47  
cytotoxicity, 21, 47  
dedifferentiation, 327  
dendritic cells, 67  
depression, 505  
discovery, 1  
drug delivery, 143, 247  
enhanced permeation and retention (EPR) 269  
enhancer, 417  
epigenetics, 417  
epithelial-to-mesenchymal transition (EMT), 337, 345  
extracellular signal-regulated kinase (ERK), 489  
fibrillar, 261  
gastric cancer, 469  
gene signature, 447  
gene therapy, 281  
glioblastoma, 327  
gold, 223  
G protein-coupled receptor kinase 2 (GRK2), 483, 489  
hematopoietic stem cells, 383  
heterogeneity, 327  
high mobility group AT-hook 2(HMGA-2), 447  
hippocampal cholinergic neuro-stimulating peptide; (HCNP), 505  
immunotherapy, 431  
infiltration, 91  
interleukin-2 (IL-2); 91  
interleukin-12, 67  
interleukin-15, 67  
LAK cells, 15  
leukemia, 383  
leukemia-initiating cells (LICs), 399  
lineage tracing, 317  
lipid binding, 405  
liposomes, 177, 247, 269  
liver kinase B1 (Lkb1), 383  
mammalian target of rapamycin (mTOR), 383  
mammary stem cells, 337  
manufacture, 121  
membrane fluidity, 21  
mesenchymal-to-epithelial transition (MET), 345  
metabolic reprogramming, 363  
metastasis, 345, 447  
migration, 77  
mitogen activated protein kinase (MAPK), 405  
Murine NK Cells, 15  
nanomaterial, 261  
nanoparticles, 143, 223, 247, 269  
Natural killer cells (NK cells), 1, 15, 47, 57, 67, 77, 91, 107, 133  
NF-E2 related nuclear factor 2 (NF- $\kappa$ B), 431, 497  
NK activation, 21  
NK subsets, 21  
NO phenotype, 21  
Notch homolog 1 (NOTCH1), 399  
nuclear magnetic resonance (NMR), 483  
neural differentiation, 505  
oncology, 143  
pathology, 405  
pharmacokinetics, 261  
pharmacology, 261  
phosphatidylethanolamine binding protein 1 (PEBP1), 505  
photodynamic therapy, 281  
poly(lactic-co-glycolic) acid (PLGA), 269  
progenitors, 337  
prognosis, 91, 455  
prostate cancer, 455  
protein kinase C (PKC), 483, 489  
quality control, 47  
quantum dots, 223  
reprogramming, 327  
resistance, 431  
signal transducer and activator of transcription 3 (STAT3), 469  
single cell analysis, 21  
snail, 431  
solid tumors, 317  
stem cells, 363, 431  
stemness, 345  
structure, 483  
submicron carriers, 269  
suppressor gene, 447, 455  
targeted therapeutics, 143  
targeting, 223, 247  
T-cell acute lymphoblastic leukemia (T-ALL), 399  
theranostics, 223  
tissue homing, 77  
transcription initiation, 417  
transcription regulation, 417  
tumor, 77  
tumor microenvironment, 91  
tumor targeting, 269  
type I interferon, 67  
vesicles, 247  
virus, 91, 107  
Yin-Yang 1 (YY1), 431