

**Dr. Rasime KALKAN, PhD**  
**E-mail:** kalkanr@yahoo.com

**Birth Date** : 20.06.1984

**Educaation and Academic Degrees :**

2005- 2011 Eskisehir Osmangazi University ,Faculty of Medicine, Department of Medical Genetics , (PhD) Eskisehir/TURKEY

2001-2005 Eskisehir Osmangazi University,Art and Science Faculty (Biology)  
Eskisehir/TURKEY

1995-2001 Güzelyurt Turk Maarif College, Guzelyurt/TRNC

**Foreign Language :** English

**PhD Thesis :**

1. Detection of alterations for mutation and methylation patterns in the cases with glioblastoma (Eskisehir Osmangazi University Medical faculty funded)

**Academic Positions:**

**Sep 2014- Present**, Near East University, Faculty of Arts and Sciences, Department of Molecular Biology and Genetics, Lefkosa- KKTC (Turkish Republic of Northern Cyprus)

**Jan. 2012- Present**, Near East University, Faculty of Medicine, Department of Medical Genetics, Lefkosa- KKTC (Turkish Republic of Northern Cyprus)

**Sep.2005-Oct .2011** Research Assist. , Osmangazi University, Department of Medical Genetics, Eskişehir, Turkey

**Scientific Experiences:**

**September 2005 - December 2008**

**Clinical Cytogenetics: Prenatal / postnatal karyotype analysis**

Worked on prenatal and postnatal tissue culture laboratories. Also applied cell culture and chromosome analysis from;

peripheral blood,  
bone marrow,  
amniotic fluid,  
chorionic villi samples,  
cordocentesis,  
fetal tissue samples,  
skin tissue biopsy samples.

**January 2009-March 2009.****Cancer Genetics**

Worked on chromosome analysis and molecular genetic analysis of the hematopoietic cancers and joined to applications in Cancer Genetics. Applied;

FISH (Flourescence In Situ Hybridisation) with all types of probe in hematopoietic malignancies to evaluate prognosis and therapy response.

M-FISH analysis for complex karyotypes

**April 2009- July 2009****Molecular Cytogenetics**

Worked on FISH analysis of the prenatal and postnatal samples.

FISH (Flourescence In Situ Hybridisation) with all type of probes for Prenatal screening, PGD analysis, Hematologic malignancies, microdeletion syndromes, subtelomeric FISH, M-FISH, Chromosome painting/ arm specific painting, amplification detection in solid tumors (HER2, ALK ect).

**July 2009- June 2010****Molecular Genetics**

Worked on this section for the diagnosis of genetic diseases by using  
Restriction enzyme analysis, RFLP  
DNA sequencing or paternity testing with ABI Prism 3130  
Realtime PCR (Light Cycler 480)  
Methylation Spesific PCR  
MS-HRM analysis

**Techniques that able to apply**

Tissue culture

Cytogenetic analysis

Molecular Cytogenetic Techniques (FISH, M-FISH, PGD ect.)

Southern blot

Restriction enzyme analysis

DNA Methylation analysis

DNA sequencing

Real Time PCR and hybrid probe analysis

**2014-Present**

Member of Scientific Committee, Tissue Engineering and Biomaterial Research Center,  
Near East University

**2012-Present**

Researcher, The Genetics and Cancer Diagnosis-Research Centre, Near East University

## Projects Finished

1. Studying P16 gene methylation by methylation specific PCR in lung cancer bronchial lavage material.
2. Studying genetic and epigenetic alterations in glioblastoma multiforme patients (Eskisehir Osmangazi University Medical faculty funded)

## Ongoing Projects

1. Telomere length dynamics and gene expression study of TRF1,TRF2,POT1, and TPP1 in patients suffering from idiopathic recurrent pregnancy loss.
2. CENP-A Methylation and Topoisomerase activity in habitual abortions

## Publications:

1. Atli EA, **Kalkan R**, Ciftci E, Ozkara E, Cilingir O, Ozdemir M, Ozbek Z, Artan S, Arslantas A, IDH2 mutations in a Turkey series of Primary Glioblastoma, Journal of Neurological Sciences 2014, Volume 31, Number 4, Page(s) 693-698
2. **Kalkan R**, Atli El, Geçmişten Günümüze Glioblastoma Genetigi, Turk Neuors. 2014, Cilt: 24, Sayı: 3, 1-11
3. **Kalkan R**, Atli El, Özdemir M, Çiftçi E, Aydin HE, Artan S, Arslantaş A, IDH1 mutations is prognostic marker for primary Glioblastoma Multiforme but MGMT hypermethylation is not prognostic for primary Glioblastoma Multiforme, Gene 554 (2015) 81–86 DOI: 10.1016/j.gene.2014.10.027
4. **Kalkan R**, Epigenetics of Glioblastoma Multiforme. J Clinic Res Bioeth 2015, 6:3 <http://dx.doi.org/10.4172/2155-9627.1000225>
5. **Kalkan R**, Glioblastoma stem cells; as a new therapeutic targets for Glioblastoma. Clinical Medicine Insights: Oncology 2015:9 95-103 DOI: 10.4137/CMO.S30271
6. Emine İkbal Atli, **Rasime Kalkan**, Muhsin Özdemir, Hasan Emre Aydin, Ali Arslantaş, Sevilhan Artan, RAR $\beta$  gene methylation is the candidate for the treatment planning in Primary Glioblastoma, in press, African Health Sciences
7. **Rasime Kalkan**, Nermin Özdağ, Rüveyde Bundak, Nedime Serakinci. A unique mosaic Turner syndrome patient with Androgen Receptor gene derived marker chromosome. In press, Systems Biology in Reproductive Medicine, DOI: 10.3109/19396368.2015.1109007
8. **Kalkan R**, Glioblastoma Multiforme: The Genetic Perspective of the Treatment Planning. Critical Reviews<sup>TM</sup> in Eukaryotic Gene Expression, 25(4):1–6 (2015) DOI: 10.1615/CritRevEukaryotGeneExpr.2015014259
9. **Kalkan R**, Hypoxia is the driving force behind GBM and could be a new tool in GBM treatment, Critical Reviews<sup>TM</sup> in Eukaryotic Gene Expression, 25(4):1–8 (2015) DOI: 10.1615/CritRevEukaryotGeneExpr.2015015601
10. **Kalkan R**. The importance of the mutational drivers in the GBM, Critical Reviews<sup>TM</sup> in Eukaryotic Gene Expression, in press
11. **Kalkan R.**, Serakinci N., Human mesenchymal stem cells in cancer therapy, in press, Critical Reviews<sup>TM</sup> in Eukaryotic Gene Expression.

## **Published Proceeding Papers:**

1. **Rasime Kalkan**, Epi-genetics and treatment planning for primary glioblastoma, K International Conference and Exhibition on Molecular Medicine and Diagnostics, August 24-26, 2015 London, UK, J Mol Genet Med 2015, 9:3 doi: 10.4172/1747-0862.S1.007
2. E.İ. Atli, , **R. Özkut**, S. Artan, A. Arslantaş, M. Özdemir. RAR $\beta$  methylation in Turkish patients with primary glioblastoma. European Journal of Cancer. Vol. 50, 05/2014; 50:e37. DOI: 10.1016/j.ejca.2014.03.144
3. E.İ. Atli, **R. Özkut**, S. Artan, A. Arslantaş, M. Özdemir. IDH2 mutations in Turkish patients with primary glioblastoma, Vol. 50, e3705/2014; DOI: 10.1016/j.ejca.2014.03.142
4. E.I. Atli, **R.Kalkan**, S.Artan, RARB gene methylation in primary glioblastomas, FEBS EMBO 2014 Conference, Paris, France, 30 August-4 September, 2014, FEBS Journal Volume 281 (Suppl. 1)(2014)65-783, P308
5. **R.Kalkan**, E.I. Atli, IDH1 mutations in a Turkey series of primary glioblastoma, FEBS EMBO 2014 Conference, Paris, France, 30 August-4 September, 2014, FEBS Journal Volume 281 (Suppl. 1)(2014)65-783, P475
6. E.I. Atli, **R.Kalkan**, S.Artan, IDH2 mutations in primary glioblastoma, FEBS EMBO 2014 Conference, Paris, France, 30 August-4 September, 2014, FEBS Journal Volume 281 (Suppl. 1)(2014)65-783, P475
7. E.İ. Atli, , **R. Özkut**, S. Artan, A. Arslantaş, M. Özdemir. IDH2 mutations in Turkish patients with primary glioblastoma 6th Asian Oncology Summit and 10th Annual Conference of the Organisation for Oncology and Translational Research Volume 50, Supplement 4, May 2014, Pages e37 doi:10.1016/j.ejca.2014.03.142
8. E.İ. Atli, , **R. Özkut**, S. Artan, A. Arslantaş, M. Özdemir. RAR $\beta$  methylation in Turkish patients with primary glioblastoma 6th Asian Oncology Summit and 10th Annual Conference of the Organisation for Oncology and Translational Research Volume 50, Supplement 4, May 2014, Pages e37 doi:10.1016/j.ejca.2014.03.144
9. S.Artan, M.H Muslumanoglu, M.Ozdemir, B.Durak, O. Cilingir, G. Bademci , E. Tepeli, **R Kalkan**, M. Oznur, N. Tekin Comparison of FISH and MLPA Techniques in detection of chromosomal rearrangements. European Cytogenetics Conference 2007, Istanbul Turkey, July 7-10, 2007, Chromosome Research Vol:15, No:1, P157
10. **Kalkan R**, Dirik E, Serakinci N., RAI1 geninde c.139G>A varyantı Smith Magenis Sendromu için yeni bir mutasyon mu? 11. Ulusal Tıbbi Genetik Kongresi, 24-27 Eylül, İstanbul 2014
11. Öndağ N.,**Kalkan R**, Serakinci N., Anöploidi Açısından Yüksek Risk Veren Biyokimyasal Tarama Testleri ve Prenatal Tanı Sonuçlarının Karşılaştırılması, 11. Ulusal Tıbbi Genetik Kongresi, 24-27 Eylül, İstanbul 2014
12. Bademci G., Tepeli E., Özdemir M., Durak B., Müslümanoğlu M. H., Kaytaz B., Öznur M., **Kalkan R.**, Artan S. The brothers have a Potential Phalen-McDermid Syndrome 22q13.3 Deletion and 6qter Trisomy .VII. National prenatal diagnosisand medical genetic conferance, 17-20 May 2006, KAYSERİ , 2006

13. Çilingir O, Bademci G, Artan S, Tekin N, Akşit A, Durak B, Özdemir M, **Kalkan R.**, A A case with Consequence of the Paternal Inversion , Partial Trisomy 10q(q26.3→10qter) and 10p(p15.1→pter) deletion VII. National prenatal diagnosisand medical genetic conferance, 17-20 May 2006, KAYSERİ , 2006
14. Emiroğlu, Ö., Yetim, M., Kütük, F., **Kalkan**, R., Karagöz E., XVII. National Biology Conference "Çatiören Sulama Barajında Yaşayan Chondrostoma nasus (L. 1758.)'Un Büyüme Parametrelerinin Araştırılması", 70 pp., Adana, Turkey, June 2004

#### **Books and Book Chapters:**

1. Role of Mesenchymal stem cells in cancer development and their use in cancer therapy, Nedime Serakinci, Pınar Tulay, **Rasime Kalkan**, Book Chapter- Springer Books Series Series Ed.: Pham, Phuc Van ISSN: 2365-4198, In press

#### **Professional Society Membership:**

1. Turkish medical genetics association
2. European Cytogenetics Association
3. TÜBİTAK/ARBİS

#### **Editorial Board Membership:**

1. Journal of Epidemiological Research (JER)
2. Journal of Epidemiology & Community
3. Journal of Syndromes and Gene Repair
4. Translational Biomedicine
5. International Journal of Transplantation Research and Technology

#### **Reviewer Board Membership:**

1. Journal of Cancer Growth and Metastasis
2. SciTechnol- Journal of Spine & Neurosurgery
3. Neural Regeneration Research
4. Journal of Clinical Case Reports
5. OMICS Group - Biomedical Journals
6. Journal of Carcinogenesis & Mutagenesis
7. Breast Cancer: Basic and Clinical Research
8. Bioinformatics and Biology Insights
9. Biomarker Insight

#### **Organization of Meetings and Conferences**

1. Symposium, “Genetics from Laboratory to Clinic”, 20 May 2014, Near East University, TRNC
2. The International Biomedical Engineering Congress 2015 (IBMEC-2015), Scientific Committee, 12-14 March 2015 Near East University, TRNC
3. IFCC WORLDSLW ISTANBUL 2014 , Abstract Revision Committee, 22-26 June 2014, Istanbul,Turkey

## Citations

1. IDH1 mutations is prognostic marker for primary Glioblastoma Multiforme but MGMT hypermethylation is not prognostic for primary Glioblastoma Multiforme
- Wang K, Wang Y, Fan X, Wang J, Li G, Ma J, Ma J, Jiang T, Dai J. (2015) Radiological features combined with IDH1 status for predicting the survival outcome of glioblastoma patients. Neuro Oncol. 2015 Sep 25. pii: nov239.
- K Rasime. (2015) Epigenetics of Glioblastoma Multiforme. J Clinic Res Bioeth 6:225. doi: 10.4172/2155-9627.1000225
- Long-term survival in glioblastoma: methyl guanine methyl transferase (MGMT) promoter methylation as independent favourable prognostic factor. Radiology and Oncology. ISSN (Online) 1581-3207, DOI: 10.1515/raon-2015-0041, November 2015