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DE GRUYTER

1st International Cell Death Research Congress - Izmir / TURKEY



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 - 6 Mayıs 2016, Cuma
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Welcome Letter

On behalf of the Cell Death Research Society of Turkey (CDRS, HÖAD, Hücre Ölümü Araştırma Derneği) it is a great honor and pleasure to invite you to the 1st International Cell Death Research Congress, which will be held on 04-07 of May 2016 in Izmir, TURKEY.

The congress is scientific refereed. The main topics of the congress will be the focusing on the importance and role of different types of cell death in oxidative stress, immunity, stem cell therapies, genome signatures, therapeutic approaches and polyphenols as anti-cancer agent in diseases.

The congress will feature plenary, key and short lectures besides poster presentations. Our main goal is to gather the scientists from universities, research centers from all over the world and offer to all a great and attractive congress joining different knowledge together on cell death.

A number of the internationally distinguished speakers with the expertise in the fields are invited. They will introduce the cutting-edge research and the future perspectives relevant to the subjects covered in the present meeting. Besides, oral and poster presentations are included for more scientific discussions.

Two years ago, the first congress of the society was international participating and over than 300 researchers from all over world mostly US and Europe including the 46 speakers were attended. Therefore, we are expecting a similar or higher participation on the date of May 2016, which is very nice time of the season in İzmir, Turkey. Congress will be held in Dokuz Eylul University School of Medicine in Izmir - one of the preeminent and biggest universities in Turkey. Izmir region itself, near the Aegean Sea, is famous for its rich culture, history and outstanding scenery. We would like to take this opportunity to invite all researchers and accompanying parties to attend this meeting and to enjoy the rich scientific program and the beauty of Turkey and Turkish hospitality.

In this regard I would like to thank to all speakers, all attendants, the Organizing Committe, all of the supporting Companies and Institutions and especially Executive Board of Turkish Biochemical Society.

Sincerely yours,

Semra Koçtürk

On behalf of the Exucitive Board of Cell Death Research Society of Turkey and Congress Organizing Committe

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We wish to express our thanks to the companies and instutions listed below for their sponsorship.

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SCIENTIFIC PROGRAMME

May 4 th 2016, Wednesday		
08:30-17:30	Registration	
09:00-10:30	Opening Ceremony:	
	*Semra KOCTURK (President of CDRS-Turkey)	
	*Pinar TUNCEL (Vice Dean of DEU School of Medicine)	
	*Murat OZGOREN (Chairman of DEPARK Executive Board)	
	*Mehmet FUZUN (Rector of DEU)	
	*Music Recital - REY Quartet, Performed by;	
	Zeynep Simhe ACUNAZ (Violin)	
	Ceyda OZDEMIR (Violin)	
	Iris ICELLIOGLU (Viola)	
	Berk KAVAK (Violoncello)	
	*Visual show: AQUA graphs. Lights Written on Water, Presented by Alp CAN	
10:30-11:00	Coffee Break	
11:00-12:00	Opening Lecture	
	Chair: Mauro PIACENTINI	
	Role Of RIP Kinases In Regulating Cell Death and Survival In Vitro and In Vivo,	
	Peter VANDENABEELE (President of ECDO)	
12:00-13:00	LUNCH	
13:00-13:30	Company Presentation - FLUIDIGM:	
	The Polaris System: Integrating Cell and Molecular Analysis, Gregory GONZALEZ	
13:30-15:15	Session 1 : Cellular Mechanisms	
13.30-13.13	Chairs: Peter VANDENABEELE, Devrim GOZUACIK	
	Chans. Feter VANDENABEELE, DEVIIII GOZUACIK	
13:30-14:15	Type 2 Transglutaminase: A Key Regulator Of Proteostasis Under Cellular Stressful Conditions,	
	Mauro PIACENTINI (Keynote Lecture)	
14:15-15:00	Autophagy At The Intersection Between Cell Survival and Cell Death: Roles In Inflammation and	
10.00	Lysosomal Homeostasis, Vojo DERETIC (Keynote Lecture)	



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SCIENTIFIC PROGRAMME

May 4 th 2016,	Wednesday
15:00-15:30	Novel Regulators Of Autophagy, Devrim GOZUACIK
15:30-16:00	Coffee Break
16:00-17:00	Open Discussion with Editorial Members of Journals Moderator: Kemal S. Korkmaz Mauro PIACENTINI Boris ZHIVOTOVSKY Francesco CECCONI Peter VANDANABEELE Yahya LALELI Ekrem GUREL
17:00-19:00	Open Discussion Problems, Suggestions for Solutions in Health Research in Turkey (Session will be held in Turkish) Moderator: Devrim GOZUACIK Sevim AYDIN - TÜBİTAK-SBAG Başkanı Murat OZGOREN - DEPARK Yönetim Kurulu Başkanı Esra ERDAL - IBG İzmir Müdür Yardımcısı

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May 5 th 2016, Thursday		
09:00-10:45	Session 2: Oxidative Stress and Cell Death Chairs: Ferhan SAGIN, Hilal KOCDOR	
09:00-09:45	Mitochondrial Substrates: A Tool To Combat Cancer, Boris ZHIVOTOVSKY (Keynote lecture)	
09:45-10:15	AMBRA1 Negative Control At The Crossroad Among Autophagy, Cell Proliferation and Cell Death, Francesco CECCONI	
10:15-10:45	In Vitro and In Vivo Characterization Of Cell Survival Genes Using Destabilized Cas9, Serif SENTURK	
10:45-11:15	Coffee Break	
11:15-12:15	Oral Presentations	
	Session-2	Session-1
	Conference Hall	Classroom- B (Downstairs)
	Chair: Semra KOCTURK	Chair: Saime BATIREL
	OP-1 Bilge Debelec BUTUNER	OP-1 Mimoune BEREHAB
	OP-2 Mehmet Eray ALCIGIR	OP-2 Ozlem ORAL
	OP-3 Pinar ERKEKOGLU	OP-3 Gulce Sarı KAPLAN
	OP-4 Ozge CAGLAR	OP-4 Ulvi AHMADOV
	-	OP-5 Elgin Turkoz ULUER
12:15-13:30	LUNCH	
13:30-15:15	Session 3: Cancer and Cell Death	
	Chairs: Fahri Saatcioglu, Kemal S. Korkmaz	
13:30-14:15	STAMPing Proliferation and Cell Death In Prostate Cancer, Fahri SAATCIOGLU (Keynote Lecture)	
14:15-14:45	ETS Transcription Factors - Critical Regulators Of Brain Tumor Initiating Cell Proliferation vs Neurodegeneration?, Isil AKSAN KURNAZ	
14:45-15:15	Diminished Cyclin Dependent Kinase Activity and mTOR Are Critical In The Cell Death Decision Through Affecting STAT Signalling Differently In Prostate Cancer Cells, Elif Damla ARISAN	



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15:15-15:45	Coffee Break	
15:45-17:35	Session 4: Stem Cell, Pluripotency and Cell Death Chairs: Alp CAN, H. Seda VATANSEVER	
15:45-16:15	The Bright and The Dark Sides Of Reprogramming To Pluripotency, Andras NAGY (Keynote Lecture)	
16:15-16:45	Stem Cell Therapy Approaches To Ischemic Cardiomyopathy, Alp CAN	
16:45-17:15	Oral Presentations	
	Session-3	Session-4
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	Chair: Kemal S. KORKMAZ	Chair: Gulinnaz ERCAN
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GENERAL ASSEMBLY OF CELL DEATH RESEARCH SOCIETY OF TURKEY

18:30-19:30



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09:00-10:45	Session 5 : Polyphenols in Cell Death Chairs: Bulent OZPOLAT, Semra KOCTURK	
09:00-09:45	Targeting Inflammatory and Apoptotic Pathways By Agents Designed By Mother Nature For Prevention and Treatment Of Cancer, Bharat AGGARWAL (Keynote lecture)	
09:45-10:15	Molecular Mechanisms Of Flavonoid Quercetin In Enhancing Apoptosis In Chronic Lymphocytic Leukemia, Gian Luigi RUSSO	
10:15-10:45	Development Of Novel Targeted Therapies For Solid Tumors, Bulent OZPOLAT	
10:45-11:15	Coffee Break	
11:15-12:15	Oral Presentations	
	Session-5	Session-3-4-5-6
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	OP-5 Ibrahim BOZGEYIK	OP-5 Ceylan HEPOKUR
	OP-6 Ayfer KARLITEPE	
12:15-13:30	LUNCH	
13:30-15:15	Session 6 : Immunity and Cell Death	
	Chairs: Nesrin OZOREN, Ayten NALBANT	
13:30-14:15	Mer Receptor Tyrosine Kinase and Macrophage Phagocytosis Of Apoptotic Cells, Ian DRANSFIELD	
14:15-14:45	Unequal Cell Death In The Differentiation Of T Helper Cell Subsets, Ayten NALBANT	



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May 6th 2016, Friday 14:45-15:15 **Oral Presentations** Session-7 Session-6 Conference Hall Classroom- B (Downstairs) Chair: Tuncay DEMIRYUREK Chair: Isil KURNAZ **OP-1** Hatice Mehtap KUTLU **OP-1** Ayten NALBANT **OP-2** Ferdiye TANER **OP-2** Zekiye S. ALTUN **OP-3** Seminay GULER **OP-3** Melike OZGUL 15:15-15:45 Coffee Break Session 7 : Therapeutic Approaches to Cell Death 15:45-17:30 Chairs: Haval SHIRWAN, Pinar AKAN Monocytes: Killers or Saviors, Gabriel LOPEZ-BERESTEIN 15:45-16:30 Apoptosis As A Powerful Means Of Immune Modulation For The Treatment Of Type 1 Diabetes, Haval 16:30-17:00 **SHIRWAN** Abnormal Brain Ganglioside Accumulation Triggers Apoptosis In Early Onset Tay - Sachs Disease Mouse Model, 17:00-17:30 Volkan SEYRANTEPE 17:30-18:00 AWARDS AND CLOSING CEREMONY May 7th 2016, Saturday

09:00-17.00 SOCIAL PROGRAMME EPHESUS TOUR





POSTER ABSTRACTS (PP)

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İÇİNDEKİLER



PP-27 MICRORNA376 FAMILY AND CANCER

<u>Yunus AKKOÇ</u>¹, Kumsal Ayse TEKİRDAĞ¹, Asiye Işın DOĞAN EKİCİ², Devrim GÖZÜAÇIK¹

¹Department of Molecular Biology Genetics and Bioengineering, Faculty of Engineering and Natural Science, Sabancı University, 34956 İstanbul, Turkey ²Department of Pathology, Yeditepe University School of Medicine, Atasehir, 34755 Istanbul, Turkey

Aim: Autophagy, is one of the most well known catabolic processes whose activation can degrade accumulated proteins as well as damaged organelles for maintaining cellular homeostasis. Beside this, autophagy was found to be associated with several abnormalities including cancer and metabolic diseases. In addition, miRNAs have been implicated in several fundamental biological processes including development, differentiation, apoptosis and stem cell maintenance. Moreover, evidence also suggests that miRNAs play a role in cellular transformation and carcinogenesis. Thus, understanding the regulation of autophagic mechanisms through miRNAs might have tremendous importance in the field of cancer. Material and Method Overexpression of MIR376B in MCF-7 cells has been utilized and several mono clone cells picked and cultured under selection condition. For further analysis, mono clones were evaluated by their autophagic capacity via LC3 shift, p62 accumulation and miR-376b target protein status. After the characterization of clones, several growth analyses were performed either short or long term assays in vitro. Clonogenic potential of MIR376B stably overexpressing and control cells were analyzed by their ability to create colonies by colony formation assay. On the other hand, Gamma-H2AX foci analysis and ROS measurement by DCFDA was carried out to identify the DNA damage and oxidative stress, respectively.

Result: As a consequence of autophagy deregulation, accumulation of p62 was observed in miR-376b stable cells. Intriguingly, intracellular ROS level was also increased and accumulation of ROS localized around the mitochondria. In addition to susceptibility of oxidative stress, loss of autophagy makes cells more prone to DNA damage. Although in short term assays, growth attenuation of miR-376b stable cells was observed; in colony formation assay, those cells formed more and bigger colonies.

Conclusion: We identified for the first time that MIR376B as a key miRNA which might has a role in tumorigenesis in breast cancer.

*This work was supported by The Scientific and Technological Research Council of Turkey (TUBITAK) 1001-114Z982 Grant and Sabanci University.

Key Words: Macroautophagy, mammalian autophagy regulation, microRNA, MIR376B, cancer