

Prof. PELİN MUTLU

Personal Information

Office Phone: [+90 312 222 5826](tel:+903122225826) Extension: 2568

Email: pmutlu@ankara.edu.tr

Web: <https://avesis.ankara.edu.tr/pmutlu>

International Researcher IDs

ScholarID: 8403642931139028807

ORCID: 0000-0001-7970-880X

Publons / Web Of Science ResearcherID: AAZ-6710-2021

ScopusID: 26032190300

Yoksis Researcher ID: 218134

Education Information

Doctorate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Graduate School Of Natural And Applied Sciences, Turkey 2002 - 2009

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Biotechnology, Turkey 2000 - 2002

Undergraduate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Biology, Turkey 1996 - 2000

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, İlaç Dirençli Multipl Myeloma Hücre Hatlarında Farklı Gen Anlatım Analizleri, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Graduate School Of Natural And Applied Sciences, 2009

Postgraduate, Lösemi Hastalarında Çoklu İlaç Dirençliliği Genindeki Polimorfizmlerin Belirlenmesi, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Biotechnology, 2002

Research Areas

Health Sciences

Academic Titles / Tasks

Professor, Ankara University, Biyoteknoloji Enstitüsü, Biyoteknoloji Anabilim Dalı, 2023 - Continues

Associate Professor, Ankara University, Biyoteknoloji Enstitüsü, Biyoteknoloji Anabilim Dalı, 2021 - 2023

Lecturer, Middle East Technical University, Presidency Office, Presidency Office, 2016 - 2021

Research Assistant, Middle East Technical University, Presidency Office, Presidency Office, 2002 - 2011

Academic and Administrative Experience

Assistant Director of the Institute, Ankara University, Biyoteknoloji Enstitüsü, Biyoteknoloji Anabilim Dalı, 2023 - Continues

Courses

Etik, Doctorate, 2022 - 2023

Nano İlaç Taşıma Sistemleri, Postgraduate, 2023 - 2024, 2022 - 2023

Jury Memberships

Doctoral Examination, Doctoral Examination, Ankara Yıldırım Beyazıt Üniversitesi, December, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, December, 2022

Doctoral Examination, Doctoral Examination, Orta Doğu Teknik Üniversitesi, November, 2022

Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, October, 2022

Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, September, 2022

Post Graduate, Post Graduate, Hacettepe Üniversitesi, September, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, August, 2022

Doctorate, Doctorate, Orta Doğu Teknik Üniversitesi, August, 2022

Doctoral Examination, Doctoral Examination, Orta Doğu Teknik Üniversitesi, April, 2022

Post Graduate, Post Graduate, Hacettepe Üniversitesi, February, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, January, 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Application of Inorganic Nanomaterials in Transdermal and Topical Medications: Influential Parameters, Opportunities and Challenges**
Servatan M., MUTLU P., ERTUNÇ S., Sanaeifard S., Sahin B., YILMAZER HİTİT Z.
COMMENTS ON INORGANIC CHEMISTRY, 2024 (SCI-Expanded)
- II. **Synthesis, Anticancer Activity, and *In Silico* Modeling of Alkylsulfonyl Benzimidazole Derivatives: Unveiling Potent Bcl-2 Inhibitors for Breast Cancer**
Abbade Y., KIŞLA M. M., Hassan M. A., ÇELİK İ., Dogan T. S., MUTLU P., ALAGÖZ Z.
ACS OMEGA, vol.9, no.8, pp.9547-9563, 2024 (SCI-Expanded)
- III. **Drug metabolism and inflammation related distinct miRNA signature of colchicine resistant familial Mediterranean fever patients**
Tümerdem B. Ş., AKBABA T. H., BATU AKAL E. D., AKKAYA ULUM Z. Y., MUTLU P., ÖZEN S., Balci-Peynircioğlu B.
International Immunopharmacology, vol.124, 2023 (SCI-Expanded)
- IV. **Investigation of the Therapeutic Effects of Palbociclib Conjugated Magnetic Nanoparticles on Different Types of Breast Cancer Cell Lines**
Parsian M., MUTLU P., Taghavi Pourianazar N., Yalcin Azarkan S., Gunduz U.
Cellular and Molecular Bioengineering, vol.16, no.2, pp.143-157, 2023 (SCI-Expanded)
- V. **Vancomycin Containing PDLLA and PLGA/beta-TCP Inhibit Biofilm Formation but Do Not Stimulate Osteogenic Transformation of Human Mesenchymal Stem Cells**
Kankilic B., Bayramli E., KORKUSUZ P., EROĞLU H., ŞENER B., Mutlu P., KORKUSUZ F.

FRONTIERS IN SURGERY, vol.9, 2022 (SCI-Expanded)

- VI. **Development of a microfluidic platform to maintain viability of micro-dissected tumor slices in culture**
Parsian M., Mutlu P., YILDIRIM E., Ildiz C., Ozen C., Gunduz U.
BIOMICROFLUIDICS, vol.16, no.3, 2022 (SCI-Expanded)
- VII. **Identification of Mitochondrial DNA Gene Mutations in a Turkish Head and Neck Squamous Cancer Patient Group**
MUTLU P., Mutlu M., YALÇIN AZARKAN S., Keseroglu K., Bayir O., Saylam G., KORKMAZ M. H.
UHOD-ULUSLARARASI HEMATOLOJİ-ONKOLOJİ DERGİSİ, vol.32, no.2, pp.109-118, 2022 (SCI-Expanded)
- VIII. **EVALUATION OF METHYLATION PROFILES OF AN EPIDERMAL GROWTH FACTOR RECEPTOR GENE IN A HEAD AND NECK SQUAMOUS CELL CARCINOMA PATIENT GROUP**
Mutlu M., Mutlu P., Azarkan S., Bayir O., Ocal B., Saylam G., KORKMAZ M. H.
BALKAN JOURNAL OF MEDICAL GENETICS, vol.23, no.2, pp.65-72, 2020 (SCI-Expanded)
- IX. **Characterization of Gemcitabine Loaded Polyhydroxybutyrate Coated Magnetic Nanoparticles for Targeted Drug Delivery**
Parsian M., Mutlu P., Yalcin S., Gunduz U.
ANTI-CANCER AGENTS IN MEDICINAL CHEMISTRY, vol.20, no.10, pp.1233-1240, 2020 (SCI-Expanded)
- X. **DETERMINATION OF THE RELATIONSHIP BETWEEN DOXORUBICIN RESISTANCE AND WNT SIGNALING PATHWAY IN HELA AND K562 CELL LINES**
Mutlu P., Azarkan S. Y., Pourianazar N. T., Yucel M., Gunduz U.
EXCLI JOURNAL, vol.17, pp.386-398, 2018 (SCI-Expanded)
- XI. **Co-delivery of Doxorubicin and D-alpha-Tocopherol Polyethylene Glycol 1000 Succinate by Magnetic Nanoparticles**
Metin E., Mutlu P., Gunduz U.
ANTI-CANCER AGENTS IN MEDICINAL CHEMISTRY, vol.18, no.8, pp.1138-1147, 2018 (SCI-Expanded)
- XII. **Half generations magnetic PAMAM dendrimers as an effective system for targeted gemcitabine delivery**
Parsian M., Mutlu P., Yalcin S., TEZCANER A., Gunduz U.
INTERNATIONAL JOURNAL OF PHARMACEUTICS, vol.515, no.1-2, pp.104-113, 2016 (SCI-Expanded)
- XIII. **Loading of Gemcitabine on chitosan magnetic nanoparticles increases the anti-cancer efficacy of the drug**
Parsian M., Unsoy G., Mutlu P., Yalcin S., TEZCANER A., Gunduz U.
EUROPEAN JOURNAL OF PHARMACOLOGY, vol.784, pp.121-128, 2016 (SCI-Expanded)
- XIV. **An update on molecular biology and drug resistance mechanisms of multiple myeloma**
Mutlu P., Kiraz Y., Gunduz U., Baran Y.
CRITICAL REVIEWS IN ONCOLOGY HEMATOLOGY, vol.96, no.3, pp.413-424, 2015 (SCI-Expanded)
- XV. **Association between XRCC3 Thr241Met polymorphism and laryngeal cancer susceptibility in Turkish population**
Mutlu P., Mutlu M., Yalcin S., YAYLACI A., Unsoy G., Saylam G., Akm I., Gunduz U., Korkmaz H.
EUROPEAN ARCHIVES OF OTO-RHINO-LARYNGOLOGY, vol.272, no.12, pp.3779-3784, 2015 (SCI-Expanded)
- XVI. **Identification of XRCC1 Arg399Gln and XRCC3 Thr241Met Polymorphisms in a Turkish Population and Their Association with the Risk of Chronic Lymphocytic Leukemia**
Mutlu P., Elci M. P., Yildirim M., Nevruz O., Cetin A. T., Avcu F.
INDIAN JOURNAL OF HEMATOLOGY AND BLOOD TRANSFUSION, vol.31, no.3, pp.332-338, 2015 (SCI-Expanded)
- XVII. **Detection of XRCC1 gene polymorphisms in Turkish head and neck squamous cell carcinoma patients: a comparative analysis with different populations**
Mutlu P., Mutlu M., Yalcin S., Unsoy G., YAYLACI A., Saylam G., Akin I., Korkmaz H., Gunduz U.
JOURNAL OF BUON, vol.20, no.2, pp.540-547, 2015 (SCI-Expanded)
- XVIII. **The-137G/C Polymorphism in Interleukin-18 Gene Promoter Contributes to Chronic Lymphocytic and Chronic Myelogenous Leukemia Risk in Turkish Patients**
Yalcin S., Mutlu P., Cetin T., Sarper M., Ozgur G., Avcu F.

TURKISH JOURNAL OF HEMATOLOGY, vol.32, no.4, pp.311-316, 2015 (SCI-Expanded)

- XIX. **Polyhydroxybutyrate-Coated Magnetic Nanoparticles for Doxorubicin Delivery: Cytotoxic Effect Against Doxorubicin-Resistant Breast Cancer Cell Line**
Yalcin S., Unsoy G., Mutlu P., Khodadust R., Gunduz U.
AMERICAN JOURNAL OF THERAPEUTICS, vol.21, no.6, pp.453-461, 2014 (SCI-Expanded)
- XX. **Synthesis of Doxorubicin loaded magnetic chitosan nanoparticles for pH responsive targeted drug delivery**
Unsoy G., Khodadust R., Yalcin S., Mutlu P., Gunduz U.
EUROPEAN JOURNAL OF PHARMACEUTICAL SCIENCES, vol.62, pp.243-250, 2014 (SCI-Expanded)
- XXI. **Different Types of Cell Cycle- and Apoptosis-Related Gene Expressions Alter in Corticosteroid-, Vincristine-, and Melphalan-Resistant U-266 Multiple Myeloma Cell Lines**
Mutlu P., Ural A. U., Gunduz U.
TURKISH JOURNAL OF HEMATOLOGY, vol.31, no.3, pp.231-238, 2014 (SCI-Expanded)
- XXII. **Association of -174G/C interleukin-6 gene polymorphism with the risk of chronic lymphocytic, chronic myelogenous and acute myelogenous leukemias in Turkish patients**
MUTLU P., Yalcin S., Elei P., Yildirim M., Cetin A. T., Avcu F.
Journal of B.U.ON., vol.19, no.3, pp.787-791, 2014 (SCI-Expanded)
- XXIII. **Idarubicin-loaded folic acid conjugated magnetic nanoparticles as a targetable drug delivery system for breast cancer**
Gunduz U., Keskin T., Tansik G., Mutlu P., Yalcin S., Unsoy G., Yakar A., Khodadust R., Gunduz G.
BIOMEDICINE & PHARMACOTHERAPY, vol.68, no.6, pp.729-736, 2014 (SCI-Expanded)
- XXIV. **Chitosan magnetic nanoparticles for pH responsive Bortezomib release in cancer therapy**
Unsoy G., Yalcin S., Khodadust R., Mutlu P., Onguru O., Gunduz U.
BIOMEDICINE & PHARMACOTHERAPY, vol.68, no.5, pp.641-648, 2014 (SCI-Expanded)
- XXV. **Bioapplications of poly(amidoamine) (PAMAM) dendrimers in nanomedicine**
Pourianazar N. T., Mutlu P., Gunduz U.
JOURNAL OF NANOPARTICLE RESEARCH, vol.16, no.4, 2014 (SCI-Expanded)
- XXVI. **Polyinosinic: polycytidylic acid loading onto different generations of PAMAM dendrimer-coated magnetic nanoparticles**
Khodadust R., Mutlu P., Yalcin S., Unsoy G., Gunduz U.
JOURNAL OF NANOPARTICLE RESEARCH, vol.15, no.8, 2013 (SCI-Expanded)
- XXVII. **Differential oncogene-related gene expressions in myeloma cells resistant to prednisone and vincristine**
Mutlu P., Ural A. U., Gunduz U.
BIOMEDICINE & PHARMACOTHERAPY, vol.66, no.7, pp.506-511, 2012 (SCI-Expanded)
- XXVIII. **Differential gene expression analysis related to extracellular matrix components in drug-resistant RPMI-8226 cell line**
Mutlu P., Ural A. U., Gunduz U.
BIOMEDICINE & PHARMACOTHERAPY, vol.66, no.3, pp.228-231, 2012 (SCI-Expanded)
- XXIX. **Effect of cobalt-60 (gamma radiation) on multidrug-resistant multiple myeloma cell lines**
Mutlu P., Baran Y., Ural A. U., Avcu F., Dirican B., Beyzadeoglu M., Gunduz U.
CELL BIOLOGY INTERNATIONAL, vol.35, no.7, pp.721-725, 2011 (SCI-Expanded)
- XXX. **Expression of Multidrug Resistance 1, Lung Resistance Protein and Breast Cancer Resistance Protein Genes in Chronic Leukemias**
Iseri O. D., Kars M. D., Mutlu P., Avcu F., Ural A. U., Gunduz U.
UHOD-ULUSLARARASI HEMATOLOJİ-ONKOLOJİ DERGİSİ, vol.21, no.2, pp.92-100, 2011 (SCI-Expanded)
- XXXI. **Multidrug Resistance Mediated by MRP1 Gene Overexpression in Breast Cancer Patients**
Abaan O. D., Mutlu P., Baran Y., Atalay C., Gunduz U.
CANCER INVESTIGATION, vol.27, no.2, pp.201-205, 2009 (SCI-Expanded)

Articles Published in Other Journals

- I. **Identification of Single-nucleotide Alterations in MAP3K8 Gene in a Turkish Head and Neck Squamous Cell Carcinoma Patient Group**
MUTLU P., Mutlu M., Yalçın-Azarkan S., Bayir Ö., Saylam G., Korkmaz M. H.
Türk Onkoloji Dergisi, vol.38, no.3, pp.257-263, 2023 (ESCI)
- II. **NEK6 gene silencing using siRNA for overcome multidrug resistance in chronic myeloid leukemia cells**
Nabioğlu A., MUTLU P., YALÇIN AZARKAN S., GÜNDÜZ U.
Avrasya Arastırma Geliştirme Bilim ve Teknoloji Merkezi Limited Sirketi, 2022 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Synthesis and Investigation of Anti-Cancer Activity of Novel Substituted Alkylsulfonyl 1H-benzo[d]imidazole Derivatives in MCF-7 Breast Cancer Cells**
Abbade Y., KIŞLA M. M., Hasan M. A., Somay Doğan T., KAŞKATEPE B., MUTLU P., Ateş Alagöz Z.
5th International Eurasian Conference on Biological and Chemical Sciences, Turkey, 23 November 2022
- II. **AML Genetiği**
MUTLU P.
VIII. Uluslararası Katılımlı Deneysel Hematoloji Kongresi, Turkey, 09 September 2022
- III. **Cytotoxic Effect of Palbociclib Conjugated PAMAM Dendrimer Coated Magnetic Nanoparticles on Different Types of Breast Cancer Cell Lines**
Parsian M., MUTLU P., TAGHAVI POURIANAZAR N., YALÇIN AZARKAN S., GÜNDÜZ U.
NANOTR-16 (16th Nanoscience and Nanotechnology Conference), Turkey, 05 September 2022
- IV. **Development of a microfluidic platform to maintain viability of micro-dissected tumor slices in culture**
Parsian M., MUTLU P., YILDIRIM E., Ildız C., ÖZEN C., GÜNDÜZ U.
The Sixth International Symposium on Pharmaceutical and Biomedical Sciences (ISPBS-6, Turkey, 26 - 28 May 2022
- V. **Türk HNSCC hasta grubunda MAP3K8 genindeki tek nükleotid değişikliklerinin belirlenmesi**
MUTLU P., MUTLU M., YALÇIN AZARKAN S., KESEROĞLU K., BAYIR Ö., SAYLAM G., KORKMAZ M. H.
16.Türk Rinoloji Kongresi, 4.Ulusal Baş Boyun Cerrahisi Kongresi ve 1. Çocuk Kulak Burun Boğaz ve Baş Boyun Cerrahisi Kongresi, Ankara, Turkey, 12 May 2022
- VI. **Targeting ability and internalization of gemcitabine loaded polyhydroxybutyrate coated magnetic nanoparticles on breast cancer cell lines.**
Parsian M., MUTLU P., YALÇIN AZARKAN S., Gündüz U.
Uluslararası katılımlı 7. Multidisipliner Kanser Araştırma 1. Temel Onkoloji Kongresi, Turkey, 11 - 14 October 2018
- VII. **Polyhydroxybutyrate (Phb) Coated Magnetic Nanoparticles For Targeting Delivery of Gemcitabine.**
Parsian M., MUTLU P., YALÇIN AZARKAN S., Gündüz U.
International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2018), 26 - 27 April 2018
- VIII. **Gene expression analysis related to drug resistance and wnt signaling pathway in doxorubicin resistant K562 cell line.**
MUTLU P., YALÇIN AZARKAN S., Taghavi Pourianazar N., Meral Y., GÜNDÜZ U.
XV. Ulausal Tıbbi Biyoloji ve Genetik Kongresi, Turkey, 26 - 28 October 2017
- IX. **the-137G/C Polymorphism in Interleukin-18 Gene Promoter Contributes to Chronic Myeloid Leukemia Risk in Turkish Patients**
Yalcin S., Mutlu P., Cetin T., Sarper M., Ozgur G., Avcu F.
56th Annual Meeting of the American-Society-of-Hematology, San-Francisco, Costa Rica, 6 - 09 December 2014, vol.124

X. Conjugation of gemcitabine to PAMAM dendrimer-coated magnetic nanoparticles for targeted delivery

Parsian M., PourianAzar N. T., Yalcin S., Mutlu P., Gunduz U.

FEBS EMBO 2014 Conference, Paris, France, 30 August - 04 September 2014, vol.281, pp.449-450

Scientific Refereeing

CURRENT PHARMACEUTICAL DESIGN, SCI Journal, July 2022

TUBITAK Project, 4007 - Bilim Şenlikleri Destekleme Programı, Ankara University, Turkey, June 2022

INTERNATIONAL JOURNAL OF NANOMEDICINE, SCI Journal, May 2022

FRONTIERS IN PHARMACOLOGY, SCI Journal, April 2022

DRUG DESIGN, DEVELOPMENT AND THERAPY, SCI Journal, April 2022

PEERJ, SCI Journal, March 2022

Metrics

Publication: 43

Citation (WoS): 591

Citation (Scopus): 728

H-Index (WoS): 9

H-Index (Scopus): 10

Congress and Symposium Activities

VIII. Uluslararası Katılımlı Deneysel Hematoloji Kongresi, Invited Speaker, Gaziantep, Turkey, 2022