**Personal**

**Date of Birth: July 19, 1970**
**Nationality: Libyan**
**Marital Status: Married**
**Number of Children: Two**

**Contact Information**

**Mobile: (218) 914461615**
**Home: (218) 924311931**
**E-mail: elzagheid@yahoo.com**
**E-mail: elzagheid@lbtrc.edu.ly**

# Adam Elzagheid, MD, PhD, Docent, FRCPath (Res).

# Curriculum Vitae

**20 Years of Teaching, Research, Administrative, and managerial Experience**:
Over the last Twenty years at Turku University, Department of Pathology and Oncology (Turku, Finland), University of Benghazi, Department of Pathology (Benghazi, Libya), Biotechnology Research Center & University of Tripoli (Tripoli, Libya), I have gained excellent teaching, research, administrative and managerial experience**.**

- Research & development experience in the prognostication of tumor biomarkers in solid tumors (such as; breast, colorectal, and prostate tumors).
- Professional experience in curriculum development, articulations, accreditation, professional certification, and Training.
- Teaching experience in general and systemic pathology, Research Methodology, molecular pathology, Lab techniques.

## ACADEMIC QUALIFICATIONS

**FRCPath (Res). (11/24)**
Fellow of Royal Collage of Pathologist by Published Works (Research), London, UK

**Professor (01/15)**
Libyan Authority for Research, Science, and Technology, Tripoli, Libya

**Visiting Professor (01/15)**
University of Tripoli, Faculty of Medicine, Department of Pathology, Tripoli, Libya

**Adjunct professor (Docent) (05/13)**
Pathology Department, University of Turku, Turku, Finland

**Post-doc (02/2004- 08/2007)**
Oncology and Radiotherapy Department, University Central Hospital, Turku, Finland

**Doctorate Degree (01/2004)**
Pathology Department, University of Turku, Finland

**M.B.CH.B (1996)**
Faculty of Medicine, University of Benghazi (formal name; Al-Arab Medical University), Benghazi, Libya

## PROFESSIONAL EXPERIENCE

- President of the Libyan Pathologist Society
- Scientific Council of the Libyan Authority for Scientific Research.
- Member of the Libyan National Committee for Biosafety and Bioethics.
- President of the academic staff committee of Libya authority for Scientific Research.
- **Current Position:** **Director-General**, Libyan Biotechnology Research Center, and visiting Professor at University of Tripoli, Tripoli, Libya
- Deputy Director-General, Libyan Biotechnology Research Center, Tripoli, Libya
- Professor, Libyan Biotechnology Research Center, Tripoli, Libya
- Full Professor, Libyan Authority for Scientific Research, Tripoli, Libya
- Associate professor, Department of Pathology, University of Benghazi, Benghazi, Libya
- Former Dean, Faculty of Medicine, University of Benghazi, Benghazi, Libya
- Deputy, Libyan Authority for Scientific Research, Benghazi Branch, Benghazi, Libya
- Head, Department of Microbiology and Parasitology, University of Benghazi, Benghazi, Libya
- Adjunct professor, Turku University, Turku, Finland
- Head, Medical Research Unit, Benghazi, Libya
- Assistant Professor, Department of Pathology, University of Benghazi, Benghazi, Libya
- Head, Department of Pathology, University of Benghazi, Benghazi, Benghazi, Libya
- Post-graduate study Coordinator, Department, University of Benghazi, Benghazi, Libya
- Lecturer, Department of Pathology, University of Benghazi, Benghazi, Libya
- Post-doc, Oncology & Radiotherapy Department, Turku University Central Hospital, Finland
- Research associate, Department of Pathology, University of Turku, Finland
- SHO, Medical Faculty, Benghazi University

## HONORS AND AWARDS

- National Academy for Scientific Research, Tripoli, Libya 2010-2017
- Turku University Foundation 2007
- Cancer Society of South-West Finland, Turku 2005
- Turku University Foundation2005
- Turku University Foundation2003
- Turku University Foundation 2002
- Cancer Society of South-West Finland, Turku 2002
- Turku University Central Hospital Foundation 2001
- Paulo Foundation 1999.

## TEACHING EXPERIENCE

- Teaching medical students: general and systemic pathology
- Teaching dental students: general and systemic pathology
- Teaching postgraduate students: general and systemic pathology

**-Basic Pathology (Robbins) for medical students:**

- General Pathology;
  - Cell injury, adaptation, and death
  - Disease of Immunity
  - Neoplasia

Disease of Organ Systems

- The blood vessels
- The heart
- The lung and the Upper Respiratory Tract
- Breast diseases
- The Oral Cavity and the Gastrointestinal Tract

**Basic Pathology (Robbins) for Dental students:**

General Pathology;

- Acute and Chronic Inflammation
- Hemodynamic Disorders, Thrombosis, and Shock
- Genetic and Environmental Diseases

**Pathologic Basis of Disease (Robbins and Cotran) for postgraduate students:**

General Pathology;

- Cell injury, adaptation, and cell death
- Disease of Immunity
- Neoplasia

Disease of Organ Systems

- The blood vessels
- The heart
- The Endocrine System
- Female Genital Tract

- Teaching postgraduate students: Research Methodology
- Teaching postgraduate students: Molecular Pathology

## RESEARCH INTEREST

Quantitative Pathology, Molecular Pathology, Prognostic markers of breast cancer, Colorectal cancer, Prognostication models, Immunohistochemical prognostication, Immunohistochemistry Automated analysis, And DNA cytometry.

## SUPERVISION, EXAMINATION, AND EDITORIAL ACTIVITIES

**Acting as a reviewer in different peer-reviewed international Journals (**such as; Tumor Biology, Histopathology, Oncology basil, Ibnosina J Med BS, BMC Cancer, and Libyan Journal of Medicine**).**
**Supervisor, internal, and external examiner for postgrad students:**
(2009) **Khaled M.I. Elgehani "**Angiogenesis in urinary bladder carcinoma; Histopathlogical and Immunohistochemical" **(Internal Examiner).**

(2012) **Amel Y. I. Eljazwey** "Pathological study of Wlim's Tumor" (**Supervisor**).

(2012) **Raja F.H. Al Jafil** "Application of adhesion molecules (E-cadherin) as a Prognostic marker in colorectal cancer" (**Supervisor**).

(2012) **Mabroka A. Attia "**Prognostic Significance of Estrogen and progesterone Receptors in Female Breast Cancer**" (Internal Examiner).**

(2012), **Taghrid H. M. Bengallol"** Expression of e-cadherin in prostatic carcinoma: Prognostic significance" (**Supervisor).**

(2013) **Warda M. Musbah Said** "Application of adhesion molecules (B-catenin) as a prognostic marker in prostate cancer" **(Internal Examiner).**

(2013) **Hiam Mohamed Elnahwi** "Evaluation of Survivin expression in Renal Cell Carcinoma by Immunohistchemistry and study it's correlation with clinic-pathological features and prognosis" (**Co-supervisor**).

(2013) **Rania A. ElSharif** "Prognostic Significance and Clinic-pathological Association of COX-2 Expression in Colorectal Carcinoma of Libyan Patients" (**Co-supervisor**).

(2013) **Intesar Salem Alhadar** "Evaluation of P53 and Ki-67 expression in basal cell carcinoma by Immunohistochemistry and study its correlation with clinicopahtological features and prognosis" (**Co-supervisor**).

(2015) **Monsef Awad El-Seed El-Mansour "**Comparative Histopahtological and Immunohistochemical studies on Mammary Gland tumomrs in Human and Canines**" (External Examiner).**

**(2016) Khadija Milod Slik. "**Uterine Smooth Muscle Tumors: clinicopathological

evaluation**”** Research study for second part of Libyan board of pathology. **(Reviewer).**

**(2016) Nagah Ragab Markus. “**Nasopharyngeal carcinoma association with Ebstin-Barr Virus**”** Research study for second part of Libyan board of pathology. **(Reviewer).**

**(2019) Mariam Ali Mohamed Hussein “**the effect of Fenugreek seeds (Trigonella Fewnum-graecum) extract on pancreatic beta cells of streptozotocin diabetic rats**”**
**(External Examiner). Department of Zoology, Faculty of Science, University of Tripoli (Resolution 3/2019 dated on 08-01-2019).**

**(2019) Ahlam Masaud B Ellafi**“Identification of alpha-galacgosidase A gene mutation I a Libyan family with Fabry' disease”
(External Examiner). **Department of Histology and Genetics, Faculty of Medicine, University of Tripoli (Resolution 1286/2019 dated on 12-10-2019).**

**(2022) Noura Mohamed Moftah Ali “**Antioxidant and antiplatelet of arbutus pavarii**”** (**Supervisor).**

**(2022) Hamza Musbah Bashir Abduljalil “**Investigation of BRCA1 exon 5,8,13 and 20 genetic variations in breast cancer among Libyan women**” (External Examiner).**
**(Resolution 272/2022 dated on 04-10-2022).**

**(2022) Yusra Ramadan Erfifi “**Effect of advanced maternal age on human placental structure (Quantitative microscopical and histochemical study)**” (External Examiner).**
**Department of Histology and Genetics, Faculty of Medicine, University of Tripoli (Resolution 3188/2022 dated on 04-10-2022).**

**(2023) Esra Samer Abedah “**Study of mismatch repair proteins in colon tissue by immunostaining**” (External Examiner). Faculty of Science, Misurata University.**
**(Resolution 38/2023 dated on 25-01-2023).**

**(2023) Omar Khalifa Muhammad Al-Atrash “**Misdiagnosis and respiratory co-infections in COVID-19 patients**” (External Examiner). Faculty of Science, Misurata University.**
**(Resolution 727/2023 dated on 17-12-2023).**

**(2024) Safaa Idris Al-Tahir Al-Sheen** “Investigation of Humoral Immune Response for SARS-COV-2 in Cancer Patients” **(External Examiner). Libyan Academy for Postgraduate Studies.**
**(Resolution No. 77/2024 dated 18-03-2024).**

**(2024) Fadela Oraibi Ahmed Abu Sarir** “Serosurvey of foot-and-mouth disease virus serotypes in Libya” **(External Examiner). Faculty of Veterinary Medicine, University of Tripoli.**
**(Resolution No. 1528/2024 dated 03-07-2024).**

**(2025) Karima Salem Al-Shoushan, "**A retrospective study of bluetongue disease in Libyan ruminants**" (external examiner). Faculty of Veterinary Medicine, University of Tripoli.**
**(Resolution No. 2859/2024 dated 10/29/2024).**

**(2025) Nuzha Muhammad Masoud Al-Omrani, "**Molecular genetic screening for azoospermia factor microdeletion AZF of the Y chromosome among infertile Libyan men**" (external examiner). Faculty of Science, University of Tripoli.**
**(Resolution No. 423/2025 dated 09/02/2025).**

**(2025) Abdul Razzaq Ahmed Al-Zawam,** "Inheritance of the Human Leukocyte Antigen-B51 Gene in Libyan Behçet's Disease Families" **(external examiner). Faculty of Medicine, University of Tripoli. (Resolution No. 900/2025 dated 03/26/2025).**

**(2025) Nada Nori Saied Qarqab "**Prognostic value of immunohistochemical expression of matrix metalloproteinase 25 (MMP25) Protein in a sample of Libyan patients with colorectal cancer**. (Supervisor)Faculty of Medicine, University of Tripoli. (Resolution No. 3635/2025 dated 14/12/2025).**

## EVALUATING FACULTY MEMBER PROMOTIONS

Decision of the Vice Dean of the University of Misrata for Scientific Affairs No. 148 of 2021 regarding the promotion of a faculty member at the College of Human Medicine, specializing in pathology, from the academic rank of Assistant Professor to the scientific rank of Associate Professor.

Decision of the President of the University of Tripoli No. 1430 of 2022 regarding the promotion of a faculty member at the Faculty of Veterinary Medicine, University of Tripoli, from the academic rank of Assistant Professor to the scientific rank of Associate Professor.

Decision of the President of the University of Tripoli No. 3188 of 2022 regarding the promotion of a faculty member at the Faculty of Human Medicine, University of Tripoli, from the academic rank of Assistant Professor to the scientific rank of Associate Professor.

Decision of the President of the University of Misrata No. 52 of 2022 regarding the promotion of a faculty member at the Faculty of Human Medicine, University of Tripoli, from the academic rank of Assistant Professor to the scientific rank of Associate Professor.

Decision of the President of the University of Misrata No. 809 of 2022 regarding the promotion of a faculty member in the Faculty of Human Medicine, Department of

Pathology, from the academic rank of Assistant Professor to the scientific rank of Associate Professor.

Decision of the President of Zawia University No. 1138 of 2022 regarding the promotion of a faculty member to the academic rank of Assistant Professor.

Decision of the President of the University of Tripoli No. 825 of 2023 regarding the promotion of a faculty member at the Faculty of Veterinary Medicine in the Department of Diseases and Laboratory Diagnosis to the academic rank of Assistant Professor.

Decision of the President of Zawia University No. 385 of 2023 regarding the promotion of a faculty member to the academic rank of lecturer.

Decision of the President of Zawia University No. 384 of 2023 regarding the promotion of a faculty member to the academic rank of lecturer.

Decision of the President of the University of Tripoli No. 3710 of 2025 regarding the promotion of a faculty member at the Faculty of Veterinary Medicine in the Department of Pathology and clinical Pathology to the academic rank of Lecturer.

Decision of the President of the University of Tripoli No. 89 of 2026 regarding the promotion of a faculty member at the Faculty of medical technology

## INVITED TALKS AND PRESENTATIONS

| | |
|---|---|
| The 35th Annual Conference of the Arab Section of the International Academy of Pathology in the State of Antalya, Turkey. | **11/24** |
| A workshop in the field of biosafety in laboratories in Morocco | **02/24** |
| The 34th Annual Conference of the Arab Section of the International Academy of Pathology in the State of Qatar. | **11/23** |
| Oral presentation in the European pathology and Infectious disease Congress, Helsinki, Finland | **11/18** |
| Poster presentation in the 14th International Congress on Surgical Pathology & Cancer Diagnosis, Rome, Italy | **05/18** |
| Poster presentation in the 27th European Congress of Pathology Serbia, Belgrade | **09/15** |
| Poster presentation in the 25th European Congress of Pathology Lisbon, Portugal. | **08/13** |

| | |
|---|---|
| Poster presentation in the 24th European Congress of Pathology Prague, Czech Republic. | **09/12** |
| Oral presentation in the 22nd Congress of the International Academy of Pathology- Arab Division | **12/10** |
| Poster presentation in the 4th Congress of African Oncology Institute | **01/09** |
| Poster presentation in the 27th International Congress of the IAP | **10/08** |
| Poster presentation in the 4th International Symposium on Targeted Anticancer Therapies, Amsterdam, the Netherlands | **03/07** |
| Poster presentation in ASCO Gastrointestinal cancers Symposium Orlando, Fl, USA, 2007 | **01/07** |
| Poster presentation in The International Conference of Pathology Montreal, Canada | **09/06** |
| Oral presentation in the 2nd JSP (JORDAN SOCIETY OF PATHOLOGY) Conference 2006 Aman | **09/06** |
| Poster presentation in the 16th Annual BioCity Symposium, Turku, Finland. | **08/06** |
| Poster presentation in the 2ndIntercongress of the European Society of Pathology, Ioannina, Greece | **05/06** |
| Poster presentation in the 4th International Symposium on Targeted Anticancer Therapies, Amsterdam, the Netherlands | **03/06** |
| Poster presentation in the 20th European Congress of Pathology, Paris, France. | **09/05** |
| Poster presentation in the 3rd International Symposium on Targeted Anticancer Therapies, Amsterdam, the Netherlands. | **03/05** |
| Poster presentation in the 14th Annual BioCity Symposium | **08/04** |
| Poster presentation in the International Conference on Applied Genomics "9thESACP/ 16th ISDQP meeting" Amsterdam, The Netherlands. | **10/03** |
| Poster presentation in the 13th Annual BioCity Symposium, The 7th Symposium of the Finnish Cancer Institute (CANCER), | **08/03** |

Turku, Finland

Poster presentation in the 18th European Congress of Pathology, Berlin, Germany **09/01**

Poster presentation in The XIth Annual Bio City Symposium "Redox regulation of Cellular Function" Turku, Finland. **08/01**

Poster presentation in 7th Congress of the European Society for Analytical Cellular Pathology, Caen, France. **04/01**

## MEMBERSHIPS

| | |
|---|---|
| Libyan Pathologists Society | **2026** |
| Royal College of Pathologists | **2024- to date** |
| International academy of Pathology, Arab division | **2010- to date** |
| European Society of Pathology | **2005- to date** |
| European Association for Cancer Research | **2005-2007** |
| Finnish Medical Society (Duodecim) | **2005-2007** |
| Libyan Medical Society-UK | **2004- to date** |
| Libyan Syndicate- Benghazi | **1998-to date** |

## OTHER SKILLS

**COMPUTER**
Word, Power Point, Excel, SAS (statistical software).
**TECHNICAL SKILLS**
PCR (polymerase chain reaction), Immunohistochemistry (Ventana), DNA Cytometry (Ahrens Cytometry Analysis System), Morphometry (Prodit, version 3), some experience in DNA sequencing and SSCP (single strand conformation polymorphism), Light and Electron microscope.
**LANGUAGES**
Arabic (mother tongue) and English (fluent)

## PUBLICATIONS, IMPACT FACTORS, CITATIONS, H-INDEX:

| **Type of Publications** | **Number *of Publications*** |
|---|---|
| Articles in International **peer-Reviewed** Journals | 78 |

| | |
|---|---|
| Abstracts | 14 |
| Other publications | 4 |
| **Total:** | **96** |

| **Citation Source** | **Number of Citations** |
|---|---|
| Research-Gate | 1255 |
| Google Scholar | 1731 |
| h-index | 23 |
| i10-index | 33 |

| **IMPACT FACOTRS** | **count** |
|---|---|
| | 351 |

## PUBLICATIONS

1- **Abdulmunem M.Abulayha[1]. Eman Eshawesh. Esam Alshareef. Fawzi Ebrahim. Adam Elzagheid**. Anticancer properties of Artemisia species: mechanisms and experimental evidence. Mol Biol Rep 53, 522 (2026). **https://doi.org/10.1007/s11033-026-11702-4. IF: 2.9**

2- Incidence and Clinical Outcomes of COVID-19 in Maintenance Hemodialysis Patients in Libya: A Prospective Descriptive Study. **Elgriw N, Gusbi E, Elshwekh H, Elcosbi J, Alhudiri I, Belhaj EM, Alamin AM, Elzagheid A,** Enattah N. **Case Rep Infect Dis. 2026 Jan 19;2026:4419576. doi: 10.1155/crdi/4419576. eCollection 2026.**

3- M. Ramsay[1,48] ✉, H. Etheredge[2] , F. Tluway[1] , M. E. D'Amato[3] , Z. Chikwambi[4] , Y. Hamdi[5] , I. Alhudiri[6] , Y. Fakim[7] , K. M. Ahmad8 , N. Belguith[9,10], D. Bentley[11], M. Boujemaa[5] , N. Calumbuana[12,13], M. Chaouch[14,] C. Charfeddine[5,15], G. Chinien[7] , N. Dukuze[16],[17], M. Eljilani[6] , **A. Elzagheid[6]** et al. Enriching African genome representation through the AGenDA project, Nature. 2026 Jan;649(8097):565-573. doi: 10.1038/s41586-025-09935-7. **IF:48.5**

4- Alhudiri IM, Ebrahim F, Elzagheid A.Unregulated use of Artemisia in cancer patients in Libya: an emerging ethical and public health concern. Libyan J Med. 2026 Dec 31;21(1):2611580. doi: 10.1080/19932820.2025.2611580**. IF:1.60.**

5- Abusrewil, S., Sherif, M., Alhudiri, I., Ebrahim, F., Almgadmi, A., Gawass, M., Gahwagi, M., & **Elzagheid, A**. **(2025**). COVID-19 vaccine uptake and infection

among pregnant women in Libya: a cross-sectional study. **BMC pregnancy and childbirth, 25(1), 1289**. https://doi.org/10.1186/s12884-025-08289-2 **IF:2.8**

6- Shinde, S. D., Tile, V. A., Ahire, K. D., Idress, H. A., & **Elzagheid A**. (2025). Pharmaceutical and Biotechnological Perspectives Regarding Melanin Pigment From Streptomyces spp. **Cureus,** *17*(11) 2025. **IF:1.3**

7- Alemam, H. A., Mahmoud, A. S., Abdunnabi, M. A., Ellafi, A. M., Elfahem, A. A., Ibrahim, K. M., ... & **Elzghied, A.).** Case fatality rate of zoonotic SARS. CoV2 and associated risk factors in the Libyan population. **Open Veterinary Journal 2025. IF1.2**

8- Ebrahim F, Milad MB, Saidi M, **Elzagheid A**. Air-Dried Human Amniotic Membranes: Sterility, Microbial Barrier, and Cytokine Retention. **Cureus.17(9),2025 Sep.IF1.3**

9- Abusrewil, S., Gawass, M., Alhudiri, I., Sherif, M., Ebrahim, F., Amgadmi, A., & **Elzagheid, A.** Seroprevalence of Bordetella pertussis antibodies in Libyan pregnant women at the time of delivery**. Vaccine: X, (2025).IF0.3**

10- Mohamed Abdusalam1, Mohamed Elbasir1 , Mohamed Ashteba1 , Almabrok Saeed1 , Fawzi Ebrahim2 , Ammar Aslougi1 , Inas Alhudiri1 , Salah Edin El Meshri3 , Monier Sharif4 and **Adam Elzagheid**, Monitoring influenza A virus in wild migratory birds and waterfowl in Libya using RT-qPCR**, Open Veterinary Journal, (2025).IF1.2**

11- Alhudiri IM, Gaballa MF, Ebrahim FO, Ahire KD, Eltaib FI, Attitalla IH, **Elzagheid AI**. Post-Acute COVID-19 Pathophysiology: Cellular Stress Responses, Immune Dysregulation, and Biochemical Signatures in Recovery Phase. Cell Physiol Biochem. **2025 Jul 29.IF2.0**

12- Asma A. Alboueishi, Fawzi O. Ebrahim, Saber Dalyom, Mohamed Breem, Warda Haroush, Sundus Alshileeb, Faihaa Omran, **Adam Elzagheid.** An Examination of Iron-Deficiency Anemia and Its Associated Risk Factors Among Libyan Workers and Their Families. **Cureus. 2025 17(2): e78606. IF:1.3.**

13- Elmaihub ES, Alhudiri I, Ramadan AM, Eljilani M, **Elzagheid A**, Elfagi F, Hassen E. Analysis of BRCA1 germline variants (exons 5, 11 and 20) in breast cancer families from Libya. **Libyan J Med. 2024 Dec 31;19(1). (PubMed) IF:1.60.**

14- Elmaihub, E. S., Alhudiri, I., **Elzagheid, A**., Elfagi, F., & Hassen, E. (**2024**). A study on patients' selection for BRCA1 and BRCA2 mutations testing by different models in Libyan women with breast cancer. **Alexandria Journal of Medicine**, 60(1), 120–130. https://doi.org/10.1080/20905068.2024.2341368 **IF0.13**

15- Ibrahim K, Thwood D, ELgheriani H, Salem M, Elgadiym Z, Zaghdani A, Alhudiri I, Habibi A, Elfahem A, Belaid S, Ermithi O, Almaghrabi M, ELmaryul A, Almadah S, Rayes A, El Meshri SE, El Salabi A, **Elzagheid A.** Prevalence of multi-drug resistant

bacteria in intensive care units at Tripoli University Hospital, Tripoli, Libya. **Libyan J Med. 2024 Dec 31;19(1). (PubMed) IF:1.60.**

**16-** Elbnnani AS, Elbasir M, Altabal S, Lamami Y, Ebrahim F, Oshah HM, Alagnef R, **Elzagheid A**, Abulayha AM. Flow cytometric detection of leukemic blasts in Libyan pediatric patients with acute lymphoblastic leukemia. **Libyan J Med. 2024 Dec 31;19(1). (PubMed) IF:1.60.**

**17-** Halla Elshwekh, Inas M. Alhudiri, **Adam Elzagheid**, Nabil Enattah, Yasmine Abbassi, Lubna Abou Assali, Ilenia Marino, Cristiana Stuani, Emanuele Buratti, and Maurizio Romano .Assessing the Impact of Novel BRCA1 Exon 11 Variants on Pre-mRNA .**SplicingCells 2024, 13, 824. https://doi.org/10.3390/cells13100824. IF5.2**

**18-** Inas Alhudiri,Christopher Nolan, Ellis, **Elzagheid**, Andrew Green, Caroline Chapman. Expression of Cathepsin D in early-stage breast cancer and its prognostic and predictive value. **Breast Cancer Res Treat. 2024 Apr 5. doi: 10.1007/s10549-024-07293 (PubMed) IF:3.0**

**19-** Abdulrhman S Elbnnani, Mohamed Elbasir, Salah Altabal, Yosra Lamami, Fawzi Ebrahim, Hakema M Oshah, Rasem Alagnef, **Adam Elzagheid**, Abdulmunem M Abulayha. Flow cytometric detection of leukemic blasts in Libyan pediatric patients with acute lymphoblastic leukemia. **Libyan J Med. 2024; 19(1): 2319895. (PubMed) IF:1.60**

**20-** Fawzi Ebrahim, Asma Alboueishi, Inas M. Alhudiri, Salah Al Tabal, Yosra Lamami, Samira Al Dwigen, Sondos Ashleb, Noha Ejenfawi, Mohamed B. Milad, Hayat Rhoumah, Salah Edin El Meshri, **Adam Elzagheid**. Single ChAdOx1 nCoV-19 dose elicits stronger immune response in previously infected individuals than in SARS-CoV2 naive persons. **Immun Inflamm Dis. 2024 Jan; 12(1): e1159. (PubMed) IF:2.7**

**21-** Inas Alhudiri, Zakarya Abusrewil, Omran Dakhil, Mosab Ali Zwaik, Mohammed Ammar Awn, Mwada Jallul, Aimen Ibrahim Ahmed, Rasha Abugrara, **Adam Elzagheid**. Impact of vaccination and risk factors on COVID-19 mortality amid delta wave in Libya: A single center cohort study. **PLoS One. 2023 Aug 4;18(8) (PubMed) IF:2.6**

**22-** Inas Alhudiri, Ahmed Abdulmagid Zaghdani, Salah Edin El Meshri, Adel Elmaghrabi, **Adam Elzagheid**. **Libya floods: preventing a public health crisis. The Lancet. 2023 Nov 18;402(10415). (PubMed) IF 88.5**

**23-** Eshraq Alsherif , Inas Alhudiri, Mouna ElJilani, Ahmad Ramadan, Paul Rutland, **Adam Elzagheid**, Nabil Enattah. Screening of interleukin 17F gene polymorphisms and eight subgingival pathogens in chronic periodontitis in Libyan patients. **Libyan J Med. 2023 Dec;18(1). (PubMed) IF:1.7**

**24-** Nada Elgriw, Véronique Métayer, Antoine Drapeau, Pauline François, Sana Azaiez, Maha Mastouri, Hajer Rhim, **Adam Elzagheid**, Najeeb Soufiyah, Jean-Yves Madec, Cherifa Chaouch, Wejdene Mansour, Marisa Haenni. Clonal, Plasmidic and Genetic

Diversity of Multi-Drug-Resistant Enterobacterales from Hospitalized Patients in Tripoli, Libya. **Antibiotics (Basel). 2023 Sep 10;12(9). (PubMed) IF:4.6**

**25-** Mohamed Elghazal, Inas M Alhudiri, Mohamed Said, Eiman Elhouderi, **Adam Elzagheid.** Myopericarditis After BNT162b2 mRNA Vaccination with Incidental Intramyocardial Bridging. **Cureus. 2023 Jan 31;15(1) (PubMed) IF:1.3**

**26-** Jallul M, Ibrahim K, Zaghdani A, Abdusalam MM, Al Dwigen SM, Atwair WS, Elbasir M, Alhudiri I, El Meshri SE, Elzagheid A. Variant-specific RT-qPCR for rapid screening of B.1.617 mutations in SARS-CoV-2. Libyan Journal of Medical 2022 Dec;17(1). (PubMed) IF:1.7

**27-** Jallul M, Elgriw N, Eltaib FI, Al Dwigen SM, Elfallah A, Elgheriani HM, Atwear WS, Milad MB, Alhudiri IM, Elzagheid A. Parents' concerns and attitudes towards school reopening during COVID-19 pandemic: a cross-sectional survey-Tripoli, Libya, 2021. Libyan Journal of Medical 2022:17(1). (PubMed) IF:1.7

**28-** Fawzi Ebrahim, Salah Tabal, Yosra Lamami, Inas M. Alhudiri, Salah Edin El Meshri, Samira Al Dwigen, Ramadan Arfa, Asma Alboeshi, Hafsa A. Alemam, Fauzia Abuhtna, Rabeeah Altrhouni, Mohamed B. Milad, Nada A. Elgriw, Mahmoud A. Ruaua, Zakarya Abusrewil, Warda Harroush, Mwada Jallul, Fouziyah S. Ali, Farag Eltaib and Adam Elzagheid. Anti-SARS-CoV-2 IgG Antibodies Post-COVID-19 or Post-Vaccination in Libyan Population: Comparison of Four Vaccines. Vaccines 2022, 10(12). (PubMed) IF:2.8

**29-** Tegally H, San JE, **...** Elzagheid AI. The evolving SARS-CoV-2 epidemic in Africa: Insights from rapidly expanding genomic surveillance. Science. 2022 Sep 15. (PubMed) IF: 45.8

**30-** Jallul M, Alhudiri I, Al-Eitan L, Elzagheid A. Warfarin pharmacogenomics in African populations: the importance of ethnicity-based algorithms. Pharmacogenomics. 2022 Sep;23(14). (PubMed) IF:2.3

**31-** Alhudiri, Inas & Ramadan, Ahmad & Ibrahim, Khaled & Eljilani, Mouna & Aboud, Adel & Salem, Mohamed & Elgheriani, Hajer & Elzagheid A. (2021). Whole-genome sequencing of SARS-COV-2 showed wide spread of B. 1.525 in February 2021 in Libya. Libyan Journal of Medicine. 2021 Dec;16(1). (PubMed) IF:1.70

**32-** Ramadan AM, Ibrahim KM, Belaid SM, Abusanina MS, Ben Elfghi M, Abughnia E, Elkikkli A, Alhudiri IM, Elzagheid Adam. Travel during COVID-19 pandemic in Libya: reasons of travel, disease importation and travel regulations. Libyan Journal of Medicine. 2021 Dec;16(1). (PubMed) IF:1.70

**33-** Zakarya Abusrewil, Inas M Alhudiri, Hamza Hussein Kaal, Salah Edin El Meshri, Fawzi O. Ebrahim, Tarek Dalyoum, Abdussamee A Efrefer, Khaled Ibrahim, Mohammed Ben Elfghi, Suleiman Abusrewil, Adam Elzagheid. Time scale performance of rapid antigen testing for SARS-COV-2: evaluation of ten rapid antigen assays. Journal of Medical Virology 2021 Dec;93(12). (PubMed) IF:4.6

**34-** Teka IA, BenHasan MH, Alkershini AA, Alatresh OK, Abulifa TA, Lembagga HA, Alhudiri IM, Elzagheid Adam. Reinfection with SARS-CoV-2: A case report from Libya. Travel Med Infect Dis. 2021 May-Jun;41. (PubMed) IF:4.5

**35-** ElJilani, Mouna Mohamed; Abdusalam, Mohamed; Abdalla, Adel; Dalyoum, Tarek; Ahmad, Salah; Alhudiri, Inas; Elzagheid, Adam. Performance Evaluation of Seven Commercial Real-Time Polymerase Chain Reaction Assays for SARS-COV-2 Detection. Libyan Journal of Medical Sciences 5(2):p 56-60, Apr–Jun 2021. | DOI: 10.4103/ljms.ljms_5_2. IF1.7

**36-** Gusbi, Eman1; Eltaib, Farag I.1; Abrahem, Abrahem F.1; Benbubaker, Walid M.1; Alhudiri, Inas M.1; Al-dabea, Sameera Ahmad2; Alemam, Hafsa A.1; Elgriw, Nada1; Elshukri, Adel M2; Hamil, Ahmed O2; bettamer, Latifa3,4; Enattah, Nabil1; Elzagheid, Adam1,5,. Cancer Incidence in Southern Libya: Updated Report from 2016 to 2018. Libyan Journal of Medical Sciences 5(1):p 11-16, Jan–Mar 2021. | DOI: 10.4103/LJMS.LJMS_74_20. IF:1.7

**37-** Ebrahim, F. O., Abolayha, A. M., Elzagheid, A. A., Abosrer, F., & Edin, E. M. S. (2020). Isolation of primary mice splenocytes for in alexandria journal of veterinary sciences. IF:0.15

**38-** Alhudiri, I. M., Ebrahim, F. O., Sassi, A., El Meshri, S. E., Fellah, A. A., Aslougi, A. K., ... & Elzagheid, A. I. (2020). Overview of epidemiology, pathogenesis and clinical aspects of COVID-19: a Libyan perspective. IOSR J. Dent. Med Sci, 19, 28-41. IF:1.5

**39-** Fetah KL, DiPardo BJ, Kongadzem EM, Tomlinson JS, Elzagheid Adam, Elmusrati M, Khademhosseini A, Ashammakhi N. Cancer Modeling-on-a-Chip with Future Artificial Intelligence Integration. Small. 2019 Dec;15(50). (PubMed) IF:3.0

**40-** Alhudiri IM, Nolan CC, Ellis IO, Elzagheid Adam, Rakha EA, Green AR, Chapman CJ. Expression of Lamin A/C in early-stage breast cancer and its prognostic value. Breast Cancer Res Treat. 2019 Apr;174(3). (PubMed) IF:5.6

**41-** Elzouki, I., Benyasaad, T., Altrjoman, F., Elmarghani, A., Abubaker, K. S., & Elzagheid, A. (2018). Cancer incidence in western region of Libya: report of the year 2009 from Tripoli pathology-based cancer registry. Libyan Journal of Medical Sciences, 2(2), 45-50.IF:1.7

**42-** Elmoaket, M., Emaetig, F., Abdulmalik, F., Torjman, F., Enattah, N., & ElZagheid, A. Primary gastric lymphoma: A study of morphology, immunophenotype, and prevalence of Helicobacter pylori infection. Ibnosina Journal of Medicine and Biomedical Sciences, 10(03), (2018). 94-98.IF:0.2

**43-** Ashammakhi NA, Elzagheid A. Organ-on-a-Chip: New Tool for Personalized Medicine. J Craniofac Surg. 2018 Jun;29(4). (PubMed) IF: 1.0

**44-** Birkman EM, Elzagheid A, Jokilehto T, Avoranta T, Korkeila E, Kulmala J, Syrjänen K, Westermarck J, Sundström J. Protein phosphatase 2A (PP2A) inhibitor CIP2A indicates resistance to radiotherapy in rectal cancer. Cancer Med. 2018 Mar;7(3). (PubMed) IF: 3.1

**45-** Aarab J, Abbess I ... Elzagheid AI. Poster abstracts of the 18th Pan Arab Cancer Congress. TUNISIA. April 19-21, 2018. Tunis Med. 2018 Apr;96(4). (PubMed) IF: 0.53

**46-** Beyased, T., Altrjoman, F., Enattah, N., Eltaib, F., Ashammakhi, N., & Elzagheid, A. (2017). Cancer Incidence in Western Libya: First Results from Tripoli Medical Center. Ibnosina J Med Biomed Sci, 9, 37-45.IF:0.2

**47-** Ashammakhi, N., Elkhammas, E., & Elzagheid, A. (2017). Organ preservation can do more. Ibnosina Journal of Medicine and Biomedical Sciences, 9(05), 126-127.IF0.2

**48-** Ebrahim, F. O., Fellah, A. M. M., Elzagheid, A., Enattah, N. S., Karem, F., Abosrer, F., ... & Elmarzugi, N. (2017). Seroprevalence of foot and mouth disease, blue tongue disease and camel brucellosis in animals imported into Libya. Alexandria Journal of Veterinary Sciences.IF0.15

**49-** Bengallo, T., El-Faitori, M., Sassi, S., Khaial, F. B., Gehani, K. E., Buhmeida, A., & Elzagheid, A. (2016). Expression of E-cadherin in prostatic carcinoma: prognostic significance. J Cancer Prev Curr Res, 4(3), 00119.IF:2.6

**50-** Elzagheid A, Emaetig F, Wesam Elzwawy, Altrjoman F, Syrjanen K, Laato M, Collan Y, and Pyrhonen S. Neurofiybromin Expression is Associated with Aggressive Disease and Poor Outcome in Colorectal Carcinoma. Anticancer Res. 2016 Oct;36(10). (PubMed) IF: 3.46

**51-** Kaur A. Elzagheid A, Birkman EM, Avoranta T, Korkeila E, Syrjänen K, Westermarck J, Sundström J. Protein phosphatase methylesterase (PME-1) expression predicts a favorable clinical outcome in colorectal cancer. Cancer Med. 2015 Dec;4(12). (PubMed) IF: 3.1

**52-** Elzagheid A, Emaetig F, Al-Kikhia L, Buhmeida A, Al-Fituri O, Syrjanen K, Laato M, Collan Y, and Pyrhonen S. High Cyclooxygenase-2 Expression Is Associated With Advanced Stages in Colorectal Cancer. Anticancer Research2013; 8(33):3137-43. (PubMed) IF: 1.7

**53-** Elzagheid A, Emaetig F, Buhmeida A, Laato M, El-Faitori O, Syrjänen K, Collan Y, Pyrhönen S. Loss of MUC2 expression predicts disease recurrence and poor outcome in colorectal carcinoma. Tumour Biol. 2013 Apr;34(2). (PubMed) IF: 1.3

**54-** Elzagheid A,Buhmeida A, Laato M, Al-Fituri, O, Collan Y, Syrjanen K, PyrhonenS.Loss of E-cadherin predicts disease recurrence and shorter survival in colorectal carcinoma. APMIS. 2012;120(7):539-48. (PubMed) IF:2.6

**55-** El Gehani K, Al-Kikhia L, Syrjanen K, Al-Fituri O, and Elzagheid A. Over-Expression of HER-2 is Associated with the Stage in Carcinomas of the Urinary Bladder. Libyan J Med. 2012;7. (PubMed) IF: 1.7

**56-** Adam Elzagheid, Abdelbaset Buhmeida, Matti Laato, Omran El-Faitori, Kari Syrjänen, Yrjö Collan, Seppo Pyrhönen. Loss of E-cadherin expression predicts disease recurrence and shorter survival in colorectal carcinoma. APMIS. 2012 Jul;120(7) (PubMed) IF: 2.6

**57-** Gehani K, Al-Kikhia L, Mansuri N, Syrjanen K, Al-Fituri O, and Elzagheid A. Angiogenesis in urinary bladder carcinoma as defined by microvessel density (MVD)

after immunohistochemical staining for Factor VIII and CD31. Libyan J Med. 2011 Mar 31. (PubMed) IF: 1.7

**58-** Abdalla F, Boder J, Buhmeida A, **Elzagheid A** and Collan Y. Image DNA in FNABs of Libyan breast disease**. Anticancer Research 2010; 30(1):175-82. (PubMed) IF: 1.7**

**59-** Ibrahim N, **Elzagheid A**, El-Hashmi H,Syrjanen K, Alhakim S. The potential value of EGFR and p53 immunostaining in urinary bladder tumor. **Libyan Journal of Medicine2009; 4(4):143-5. (PubMed) IF: 1.7**

**60-** Zhou Q, Talvinen K, Sundström J, **Elzagheid A**, Pospiech H, Syvaoja J,Collan Y. Mutations/polymorphisms in the 55 kDa subunit of DNA polymerase epsilon in human colorectal cancer. **Cancer Genomics Proteomics. 2009 Nov-Dec;6(6). (PubMed) IF3.3**

**61-** Buhmeida A, Hilska M, **Elzagheid A**, Laato M, Collan Y, Syrjänen K, Pyrhönen S. DNA image cytometry predicts disease outcome in stage II colorectal carcinoma.**. Anticancer Research2009;29 (1):99-106. (PubMed) IF:1.7**

**62- Elzagheid A**, Korkeila E, Bendardaf R, Buhmeida A, Heikkilä S, Vaheri A, Syrjänen K, Pyrhönen S, Carpén O. Intense cytoplasmic ezrin immunoreactivity predicts poor survival in colorectal cancer. **Hum Pathol. 2008 Dec;39(12) (PubMed) IF: 2.6**

**63-** Abdalla F, Boder J, Buhmeida A, Hashmi H, **Elzagheid A**, Collan Y. Nuclear morphometry in FNABs of breast disease in Libyans. **Anticancer Research2008;28(6B):3985-9. (PubMed) IF: 1.7**

**64- Elzagheid A**, Buhmeida A,Korkeila E,Collan Y, Syrjanen K, Pyrhonen S. Up-regulation of alpha-catenin is associated with increased lymph node involvement in colorectal cancer. **World Journal of Gastroenterology 2008;14 (31):4903-8. (PubMed) IF: 4.3**

**65- Adam Elzagheid**, Abdelbaset Buhmeida, Eija Korkeila, Yrjo Collan, Kari Syrjanen, Seppo Pyrhonen. Nuclear beta-catenin expression as a prognostic factor in advanced colorectal carcinoma. **World J Gastroenterol. 2008 Jun 28;14(24) (PubMed) IF:4.3**

**66-** Buhmeida A, **Elzagheid A**, Collan Y, Syrjanen K, Pyrhonen S. Expression of the cell-cell adhesion molecule β-catenin in colorectal carcinomas and their metastases. **APMIS 2008; 116 (1):1-9. (PubMed) IF:2.6**

**67- Elzagheid, A., Korkeila, E., Bendardaf, R., Buhmeida, A., Heikkilä, S., Vaheri, A., ... & Carpén, O. (2008). Intense cytoplasmic ezrin immunoreactivity predicts poor survival in colorectal cancer. Human pathology, *39*(12), 1737-1743.IF:2.6**

**68-** Bendardaf R, **Elzagheid A,** Ålgars A, korkeila E, Ristamäki R, CollanY, Syrjänen K, Pyrhönen S.Thymidylate synthase expression in the primary colorectal tumors correlate with its expression in metastases. **Scand J Gastroenterol. 2007 Apr;42(4):471-6. (PubMed) IF:1.8**

69- **Elzagheid A ,**Kuopio T,Pyrhönen S, Collan Y. Lymph node status as a guide to selection of available prognostic markers in breast cancer: the clinical practice of the future. **Diagn Pathol. 2006 Nov 8 (Highly accessed). (PubMed) IF: 2.6**

70- Bendardaf R,Ålgars A, **Elzagheid A,** Korkeila E,Ristamäki R,Lamlum H,CollanY, Syrjänen K, Pyrhönen S. Comparison of CD44 expression in primary tumours and metastases of colorectal cancer. **Oncology reports 2006; 16 (4):741-46. (PubMed) IF:3.8**

71- **Elzagheid A** , Ålgars A, Bendardaf R, Lamlum H, Ristamäki R, Collan Y, Syrjänen K, Pyrhönen S. E-cadherin expression pattern in primary colorectal carcinomas and their metastases reflects disease outcome. **World Journal of Gastroenterology 2006; 12 (27): 4304-4309. (PubMed) IF:5.4**

72- Bendardaf R,Lamlum H, **Elzagheid A,**Ristamaki R, Pyrhonen S. Thymidylate synthase expression levels: A prognostic and predictive role in advanced colorectal cancer. **Oncology reports 2005; 14(3):657-62. (PubMed) IF:3.9**

73- Bendardaf R, **Elzagheid A,** Lamlum H,Ristamaki R**,** Collan Y, Pyrhonen S. Cell adhesion molecules (E-Cadherin, CD44s and CD44v6) and tumour differentiation in advanced colorectal cancer. **Oncology Reports 2005; 13(5):831-835. (PubMed) IF:3.9**

74- **Elzagheid A**, Kuopio T, Collan Y. Implementation of DNA cytometric measurements in FNAB diagnostics of breast disease. **Cancer cytopathology. 2004 Dec 25;102(6). (PubMed) IF: 3.2**

75- **Elzagheid A**, Kuopio T, Korhonen AM, Collan Y. Apocrine change in fine-needle aspiration biopsy: nuclear morphometry and DNA image cytometry. **APMIS. 2003 Sep;111(9):898-904. (PubMed) IF: 4.3**

76- **Elzagheid A**, **Collan** Y. Fine needle aspiration biopsy of the breast: Value of nuclear morphometry after different sampling methods. **Anal Quant Cytol Histol. 2003 Apr;25(2):73-80. (PubMed) IF: 0.3**

77- **Elzagheid A**, Dependence of DNA-histograms on the sampling techniques in fine needle aspirates of the breast. **Anal Cell Pathol. 2002;24(4-5):159-65. (PubMed) IF: 2.7**

78- **Elzagheid A**, Kuopio T, Ilmen M, Collan Y. Prognostication of invasive ductal breast cancer by quantification of E-cadherin immunostaining: the methodology and clinical relevance. **Histopathology. 2002 Aug;41(2):127-33. (PubMed) IF: 4.1**

**Other Scientific Publications:**

1. **Elzagheid A.** Application of E-cadherin immunostaining, DNA image cytometry, and nuclear morphometry in diagnosis and prognosis of breast diseases. Finnish breast cancer group. No.2, 2004, P.20-22.

2. **Elzagheid A.** Application of E-cadherin immunostaining, DNA image cytometry, and nuclear morphometry in diagnosis and prognosis of breast diseases. 2003, Doctoral thesis, University of Turku, Finland. Annales Universitatis Turkuensis, ser D 586, pp. 108.
3. Collan Y, Kujari H, Buhmeida A, **Elzagheid A,** Kronqvist P, Zhou Q. Common types of humen cancer: current views of prevention, causes, and treatment of breast cancer and prostate cancer. Proceedings of XIV Paulo Foundation Symposium 1999. Turku (ed) 2001.
4. **Elzagheid A**, ElFiruri O. The Prognostic and Predictive value of Immunohistochemstry Markers in stage II Colorectal Carcinoma. **2017**, Thesis, Libyan Authority for Scientific Research**. pp. 171**.

# Abstracts:

1. Adam Elzagheid, Khaled Abdulmola, Fatma Emaetig, Sara Glessa and Kari Syrjänen. Survivin and livin expression as prognostic markers in the primary breast cancer and their lymph node metastases. **November 26-27, 2018 Helsinki, Finland.**

2. Glesa S, Emaetig F, Alragig M, Elnattah N, Jaber M, Obida E, ElFagieh M, Elzagheid A Prognostic significance of surviving and livin expression in the primary breast cancer and their lymph node metastasis. **Surgery Curr Res 2018, 8.**

3. Said W, Emaetig F, El Gehani K, Eldarat T, Buhmeida A, **Elzagheid A**, El-Faitori O. (P0148) B-catenin as a prognostic marker in Libyan patients with Prostatic Carcinoma. **EJC. May 2014; 50, supplement 4; P:e51.**

4. Emaetig F, El Gehani K, El Nahwie H, Buhmeida A, **Elzagheid A.** (P0150) Survivin Expression in Renal Cell Carcinoma and Its Correlation with Clinicopathological Parameters**. EJC. May 2014; 50, supplement 4; P:e51.**

5. Aljafil R, Emaetig F, Sassi S, El Hasadi I, El Gehani K, Buhmeida A, El-Faitori O, **Elzagheid A**. (P0167) E-cadherin expression in Libyan patients with colorectal carcinoma. **EJC. May 2014; 50, supplement 4; P:e57.**

6. **Elzagheid A** , Korkeila E, Bendardaf R, **,** Buhmeida A, Heikkila S, Syrjänen K, Pyrhönen S, Carpen O. Prognostic significance of Ezrin in advanced colorectal cancer. **LJM. 2007; 2(2), supplement; P:13.**

7. Bendardaf R, **Elzagheid A**, Ristamäki R, Syrjänen K, Pyrhönen S. Expression of thymidylate synthase in primary colorectal carcinoma and their corresponding metastases. **JCO. 2006; 24(18S):13587.**

8. Zhou Q, Collan Y, **Elzagheid A,** Sundstrom J, Effati R, Talvinen K, Pospiech H, Suvaoja J: Human DNA polymerase epsilon in human breast and colorectal cancer. **Mod Pathol. 2006; 19: Suppl. 3, 74,.**

9. **Elzagheid A** , Ålgars A, Bendardaf R, Lamlum H, Ristamäki R, Collan Y Syrjänen K, Pyrhönen S. E-cadherin expression pattern in primary colorectal carcinomas and their metastases reflects disease outcome. **Virchows Arch. 2005; 447(2), P:285-286.**

10. **Elzagheid A**, Bendardaf R, Collan Y, Pyrhonen S. E-cadherin, CD44S and CD44V6 correlate with tumour differentiation in colorectal cancer.**Ann Oncol. 2005; 16; Supplement 3, (P iii39).**

11. Bendardaf R, Lamlum H, **Elzagheid A,** Ristamaki R, Pyrhonen S. Thymidylate synthase expression levels: A prognostic and predictive role in advanced colorectal cancer. **Ann Oncol. 2005; 16; Supplement 2, (P ii284).**

12. Collan Y, **Elzagheid A**, Kuopio T. DNA cytometry helping fine needle aspiration biopsy diagnosis of the breast. **Pathol Int. 2004; 54(s2), (A43-44).**

13. **Elzagheid A**, Collan Y, Kuopio T. Prognostication of breast cancer by quantitation of E-cadherin: the methodology and clinical relevance. **Anal Cell Pathol. 2001; 22, (1,2).**

14. Collan Y, Jalava P, **Elzagheid A**, Buhmeida A, Aaltonen M, Kronqvist P, Kuopio T. Problem solving in modern pathology. **Electronic J Pathol. 2000 6(3).**

## REFERENCES

**Olli Carpen**, M.D., Ph.D
Professor of Pathology
Department of Pathology,
University of Turku, Finland
E-mail:olli.carpen@utu.fi

**Prof. Kari Syrjänen**, MD, PhD, FIAC
Chief Medical Director
BiohitOyj
Laippatie 1, FI-00880 Helsinki, Finland
Tel: +358 9 773 86 304, Mobile: +358 40 556 6810
kari.syrjanen@biohit.fi, www.biohit.fi

**Nureddin Ashammakhi,** MD, PhD,
Associate Director, Center for Minimally Invasive Therapeutics (C-MIT),
University of California, Los Angeles
Room # 4528,
California NanoSystems Institute,
570 Westwood Plaza, Los Angeles, CA 90095
E-mail: n.ashammakhi@ucla.edu