

CURRICULUM VITAE

Name: Zsombor Zrubka MD, MBA, PhD

EDUCATION AND ACADEMIC DEGREES

- 2019 PhD, Corvinus University of Budapest, Doctoral School of Management, Health Economics Section (Diploma ID: PhD 33/2019)
- 2006 MBA at Oxford Brookes University – Omegaglen (Diploma ID: 0353482)
- 1997 Medical doctor at Semmelweis University, Budapest (Diploma ID: 296/1997)

PROFESSIONAL EXPERIENCE IN ACADEMIA

- 2020– Associate professor, head of HECON–Health Economics Research Center, Óbuda University
- 2020–2022 Part-time research fellow, Corvinus Institute for Advanced Studies, Corvinus University of Budapest
- 2020–2020 Senior lecturer, Department of Health Economics, Corvinus University of Budapest
- 2019–2020 Assistant professor, Department of Health Economics, Corvinus University of Budapest
- 2019–2022 Professional coordinator, research project lead at Corvinus University of Budapest, Thematic Excellence Program (NKFIH-869-4/201) National Research, Development and Innovation Office
- 2018–2020 Assistant research fellow, Corvinus University of Budapest
- 2015–2019 PhD candidate, Department of Health Economics, Corvinus University of Budapest
- 1999–2000 PhD candidate, Semmelweis University of Medicine

PROFESSIONAL EXPERIENCE IN THE PHARMACEUTICAL INDUSTRY

- 2015 – 2017 Head of Specialty Business Unit
Sandoz Hungary Plc.
- 2011 – 2015 International biotechnology and oncology marketing team leader,
International Business Unit Manager Biotechnology and Oncology,
International Business Unit Manager Biotechnology
Egis Pharmaceuticals Plc.
- 2010 – 2011 Business development manager
- 2010 Head of marketing Business Unit 1
Pfizer Hungary
- 2009-2010 Medical team leader psychiatry / Zeldox - Specialty Care Business
Unit Europe / Australia New Zealand
Employer: Pfizer Hungary, team location: Paris, France

2006-2009 European Brand manager, Senior European Brand Manager Zeldox
European Brand Team (EBT), Zeldox, Neuroscience European Brand
Team; Pfizer UK, Pfizer Germany

2002-2006 Product manager
Pfizer Hungary

2000-2002 Sales representative
Janssen-Cilag, division of Johnson & Johnson Ltd.

PROFESSIONAL EXPERIENCE IN HEALTHCARE

1997-1998 Resident in psychiatry, child psychiatry: National Institute of Psychiatry and Neurology, Vadaskert Hospital

OTHER FUNCTIONS IN HIGHER EDUCATION

2023– Chair of the Credit Transfer Committee at Innovation Management Doctoral School, Óbuda University
2023– Core faculty member, Innovation Management Doctoral School, Óbuda University, Budapest
2020– Member of the admissions board, supervisor, Doctoral School of Applied Informatics and Applied Mathematics, Óbuda University, Budapest
2020– Secretary, Scientific Council at Óbuda University, Budapest
2019– Supervisor, Doctoral School of Business and Management, Corvinus University, Budapest
2018–2020 Member, Scientific Council at Corvinus University of Budapest

EDUCATION EXPERIENCE IN HIGHER EDUCATION

2023 Development of Proof of Concept Innovation Project Course at Óbuda University
2023 Development of Clinical Epidemiology Course for the Hospital Engineering Masters Programme at Óbuda University
2023 Development of the Health Economic Modelling PhD Course at the Doctoral School of Applied Informatics and Applied Mathematics at Óbuda University
2022 Contribution to the development of the Innovation Management PhD Program at Óbuda University, member of the founding board.
2022 Development and leading PhD course in English (Doctoral School of Applied Mathematics and Applied Informatics, Óbuda University): Quantitative synthesis of scientific evidence related to health, meta-analysis
2021 Project member – contribution to the development of the Business Informatics Masters Program and the Hospital Technology Masters Program at Óbuda University, development of courses
2020 BSc / MSc course development in English: Introduction to Health Economics, The Economics of Health Technology Innovation (Óbuda University)
2020 Project member - Data Science Programme Development, Corvinus University of Budapest
2018 Subject development in English language: Economics of Healthcare Innovation (MSc/BSc)
2015–2020 Education in Hungarian / English (BSc /MSc)

Quantitative data analysis; Health policy and financing, Health economics, Introduction to health economics. Transforming two courses to online form.

- 2011–2015 Guest lecturer at Corvinus University of Budapest, lectures in Hungarian and English language in Health Policy and Financing and Health Economics courses
- 2000 PhD candidate Semmelweis University of Medicine, Doctoral School Participation in clinical research and education projects.

TALENT MANAGEMENT EXPERIENCE IN HIGHER EDUCATION

- 2019– PhD supervision in Hungarian and English language: Kopcsónén Németh Irén Anna (part-time, year of graduation: 2021, Corvinus University of Budapest, Doctoral School of Business and Management) Omar Rashdan (part-time, year of graduation: 2021, Corvinus University of Budapest, Doctoral School of Business and Management), Hosein Motahari Nezhad (year of graduation: 2023, Corvinus University of Budapest, Doctoral School of Business and Management), Meriem Fgaier, Hana Al-Abdulkarim (expected time of graduation 2026, Óbuda University Doctoral School of Applied Informatics and Applied Mathematics), Barbara Tóth (expected time of graduation 2026, Óbuda University Doctoral School of Innovation Management) , Dóra Szerencsés (expected time of graduation 2027, Óbuda University Doctoral School of Innovation Management)
- 2023 Member of committee, secretary: thesis proposal debate of Bence Czakó, Óbuda University Doctoral School of Applied Informatics and Applied Mathematics
- 2022 Member of PhD complex examination board: Nóra Radó (Semmelweis University, supervisor: Dr. Zsuzsa Györffy)
- 2022 New National Excellence Program (ÚNKP) Conference at Óbuda University, 2022.06.09. Engineering Sciences – Computer Sciences – Section Chair
- 2021 Member of PhD defence committee: Ágnes Györgyey (Semmelweis University)
- 2020 PhD opposer: dr. Márta Szegedi, Semmelweis University School of PhD studies.
- 2019– Scientific Study Circle supervision in Hungarian and English languages: Áron Pap, Dorottya Horváth, Barbara Tóth (2020. Health Economics Section 2nd place)
- 2019– Master’s thesis supervision in Hungarian and English languages 2019: Mmushi Matjila (excellent), Anna Arunashvili (excellent), 2020: Barbara Tóth (excellent), Gabriella Kiss (excellent), Francesca Lombardo (in progress)

AWARDS IN HIGHER EDUCATION

- 2021 European Doctoral Programmes Association of Business and Management - EDAMBA 2021 Thesis Competition 2nd prize

2019 Award of the Student Council of Corvinus University of Budapest, Best lecturer of 2nd semester 2019; 3rd place

EXPERIENCE IN RESEARCH AND RESEARCH MANAGEMENT

- 2022- Professional lead of EcoAction at Óbuda University, an international consortium aiming to develop the university innovation ecosystem. Funded by the European Institute for Innovation and Technology.
- 2022-2023 Management Committee member of COST ACTION CA21147 - European Network on Optimising Treatment with Therapeutic Antibodies in chronic inflammatory diseases (ENOTTA), lead of Workgroup 4 (Cost-effectiveness assessment, acceptability and implementation)
- 2022 Contribution to the Health and Society workpackage of the RISEN higher education consortium
- 2021- Key contributor in the Thematic Excellence Program: Development and assessment of Innovative Digital Health Technologies (TKP2021-NKTA-36)
- 2021-2022 Contribution to the Measuring university excellence in the V4 region; eliminating invisibility and getting recognition research project, supported by Visegrad Fund
- 2021-2022 Research project lead in the Tématerületi Kiválósági Program funding scheme at Corvinus University of Budapest, financed under TKP2020-NKA-02 of the National Research, Development and Innovation Fund of Hungary
- 2020-2021 Contributor to the European Research Council (ERC) Horizon 2020 research and innovation programme (grant agreement No 679681)
- 2020 ISPOR (International Society for Pharmacoeconomics and Outcomes Research) Digital Health Special Interest Group: participation in the Categorization and Definitions of Digital Health Interventions Scoping Review project
- 2020 Professional organizer of the Corvinus Health Policy and Health Economics Conference Series 2020/I. (Corvinus University of Budapest, 2020.02.25.) Title: The Value of Digital Health, Is Health Economics Ready for Digital Transformation? Invited speakers: dr. Katarzyna Kolasa (Kozminski University, Warsaw), István Csizmadia (ÁEEK), Gergő Merész (OGYÉI), Zsolt Szombathelyi (Richter Gedeon Plc.), Oscar Brito Fernandes (PhD candidate, Corvinus University of Budapest / University of Amsterdam), dr. Zsombor Zrubka (Corvinus University of Budapest), moderator: Prof Márta Péntek.
- 2019–2020 Professional coordinator: Thematic Excellence Program at Corvinus University of Budapest (NKFIH-869-4/201) funded by the National Research, Development and Innovation Office. Leading two scientific projects: Economic and societal benefits of digitalization in healthcare and the health industry; The economic and societal benefits of biotechnology

- 2019 As consortium member, contribution to the preparation of H2020 grant proposal: CS1-BHC-25-2019 Demonstration pilots for implementation of personalised medicine in healthcare, proposal ID: 847953, STAR-PILOT (Large-scale pilots of the stochastic targeted protocol for personalised glycaemic control of critically ill patients)
- 2018–2020 Participation as researcher in the Higher Education Excellence Program at Corvinus University of (20764-3/2018/FEKUTSTRAT)

REPRESENTATION IN INDUSTRY ASSOCIATIONS, SCIENTIFIC ORGANISATIONS

- 2020– Secretary, Hungarian Economic Association, Health and Health Care Economics Section
- 2020– Member, Hungarian Economic Association, Health and Health Care Economics Section
- 2019– Key scientific project co-chair, ISPOR (International Society for Health Economics and Outcomes Research) Digital Health Special Interest Group
- 2014–2015 Representing Egis Pharmaceuticals Ltd. in the European Generic Association’s Biosimilar Medicines Group’s Market Access Committee
- 2015–2017 Representing Sandoz in the Hungarian Generic Associations’ Biosimilar Working Group

INTERNATIONAL CONFERENCES

- 2023 ISPOR Europe 15-17 November 2023, Copenhagen. Speaker: Extending the PICOTS Framework for Evidence Syntheses of Digital Health Interventions: Results of a Delphi Consensus Study. Session: Advancements in Digital Health Interventions: Evidence Syntheses, Value Assessment, and Global Perspectives
- 2023 International Market Access Society (IMAS) Access Europe 2023 Conference, 2023 Oct 2-4 Budapest, Hungary, Panel member: Assessing the Value of Digital Health Technologies Oct 4, 13.00-14.15.
- 2023 ISPOR Europe 15-17 November 2023, Copenhagen. Discussion Leader: An Evidence Analysis Framework for Digital Health,
- 2023 IEEE 23rd International Symposium on Computational Intelligence and Informatics (CINTI 2023) Chair of Online Session on Neural Networks
- 2023 IEEE 21st International Symposium on Intelligent Systems and Informatics (SISY 2023), chair of Online Session on Informatics

- 2023 27th IEEE International Conference on Intelligent Engineering Systems (INES 2023) session chair on Cyber-Medical Systems
- 2022 IEEE 20th Jubilee International Symposium on Intelligent Systems and Informatics (SISY 2022). Organizer and track chair: Special Session on Research Protocols and Systematic Reviews
- 2022 ISPOR Europe 2022 Quo Vadis? Speaker: Evolving the ISPOR Digital Health SIG for 2023 and Beyond. (ISPOR Forums)
- 2021 Virtual ISPOR Europe 30, November – 3, December 2021, Speaker: Do ICERs Support the Digital Revolution? (ISPOR Forum)

SCIENTIFIC PUBLICATIONS (status as of May 2022)

Combined impact factor IF: 118.5 (148 publications, out of which journal article: 51; D1:19 Q1:12, Q2:7. MTMT (Hungarian Scientific Bibliography) total citations: 578, out of which independent citation:452, Hirsch index: 11. (Google Scholar total citations: 703, Hirsch-index: 14)

MTMT

<https://m2.mtmt.hu/gui2/?type=authors&mode=browse&sel=10059860&view=simple>
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Google Scholar

<https://scholar.google.com/citations?hl=en&user=Aos-sEIAAAAJ>

REVIEWER IN SCIENTIFIC JOURNALS

Slovenian Journal of Public Health, Rheumatology International, European Journal of Health Economics, PLoS One, Expert Opinion On Biological Therapy, Risk Management and Healthcare Policy, Smart Homecare Technology and TeleHealth, The Journal of Medical Economics, Health and Quality of Life Outcomes, Journal of Medical Internet Research, Applied Network Science, Biologics: Targets and Therapy, Open Access Rheumatology: Research and Reviews; ClinicoEconomics and Outcomes Research, International Journal of General Medicine, Nature Scientific Reports, Adis BioDrugs, Journal of Advances in Medicine and Medical Research, Clinical Interventions in Aging, Frontiers Public Health, International Journal of General Medicine, Expert Review of Pharmacoeconomics and Outcomes Research, Therapeutics and Clinical Risk Management, Frontiers Pharmacology, Frontiers in Pharmacology, section Drugs Outcomes Research and Policies, Journal of Inflammation Research, Frontiers in Psychology, BMJ Open, JMIR Neurotechnology, JMIR Formative Research, JMIR Rehabilitation and Assistive Technologies, JMIR Public Health and Surveillance, JMIR Research Protocols, Interactive Journal of Medical Research, Heliyon, Nursing Open, npj Digital Medicine

EDITOR IN SCIENTIFIC JOURNALS

Frontiers in Health Services Cost and Resource Allocation section: review editor

PLOS One: academic editor

Budapest, 2023.12.11

Dr. Zsombor
Zrubka

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Zsombor Zrubka (2023.12.01)

Number of publications: 148, journal article: 51 (Scimago D1: 19, Q1: 12, Q2: 7)
Total citations: 578, independent citations: 452

List of publications

2023

Journal article

Hölgyesi Á, Gulácsi L, Zrubka Z, Poór G, Kovács L, Baji P, Péntek M. Új eszköz a mozgásszervi problémákkal élők egészségének értékelésére: a Musculoskeletal Health Questionnaire. *Magyar Reumatológia*, 2023;64():22 [mtmt](#)

Hölgyesi Á et al. Epidemiology and patients' self-reported knowledge of implantable medical devices: Results of a cross-sectional survey in Hungary. *PLOS One*, 2023;18(4): doi: 10.1371/journal.pone.0284577 (Scimago Q1) [mtmt](#) [doi](#)

Tran T, Péntek M, Motahari-Nezhad H, Abonyi J, Kovács L, Gulácsi L, Eigner G, Zrubka Z, Ruppert T. Heart Rate Variability Measurement to Assess Acute Work-Content-Related Stress of Workers in Industrial Manufacturing Environment—A Systematic Scoping Review. *Ieee Transactions On Systems Man And Cybernetics: Systems*, 2023;(): doi: 10.1109/TSMC.2023.3282141 (Cit: 1; Scimago D1) [mtmt](#) [doi](#)

Móga K, Hölgyesi Á, Zrubka Z, Péntek M, Haidegger T. Augmented or Mixed Reality Enhanced Head-Mounted Display Navigation for In Vivo Spine Surgery: A Systematic Review of Clinical Outcomes. *Journal Of Clinical Medicine*, 2023;12(11): doi: 10.3390/jcm12113788 (Cit: 3; Scimago Q1) [mtmt](#) [doi](#)

Conference paper

Márta P, Tamás H, János T, Levente K, Zsombor Z, László G. EQ-5D studies in robotic surgery: a mini-review. (2023) Megjelent: IEEE 17th International Symposium on Applied Computational Intelligence and Informatics SACI 2023 : Proceedings pp. 519-524 url: <https://doi.org/10.1109/SACI58269.2023.10158630> [mtmt](#) [doi](#)

Zsombor Z, Áron H, Mehdi N, Hossein M, Seyedali M, Levente K, Márta P, László G. Towards a single goodness metric of clinically relevant, accurate, fair and unbiased machine learning predictions of health-related quality of life. (2023) Megjelent: IEEE 27th International Conference on Intelligent Engineering Systems 2023 (INES 2023) pp. 285-290 [mtmt](#)

Hana A, Zrubka Z. How Effective is Continuous Glucose Monitoring? A Comparison of different Random Effect Meta- analysis Techniques. (2023) Megjelent: SISY 2023 IEEE 21st International Symposium on Intelligent Systems and Informatics pp. 477-480 [mtmt](#)

Meriem F, Zrubka Z. Cross-country comparison and ranking: a scoping review of economic similarity indexes. (2023) Megjelent: IEEE 23rd International Symposium on Computational Intelligence and Informatics (CINTI 2023) : Proceedings pp. 171-175 [mtmt](#)

Tóth B, Gulácsi L, Zrubka Z. The relationship between young adults' internet skills and their satisfaction with life and career. (2023) Megjelent: SISY 2023 IEEE 21st International Symposium on Intelligent Systems and Informatics pp. 309-314 [mtmt](#)

Meriem F, Zrubka Z. Less is more: imputing for missing direct medical costs within the Middle East and North Africa region using macroeconomic indicators. (2023) Megjelent: SISY 2023 IEEE 21st International Symposium on Intelligent Systems and Informatics pp. 469-475 [mtmt](#)

Other

Á H, Zrubka Z, Luczay A, Tóth-Heyn P, Muzslay E, Szabó A, Világos E, Gulácsi L, Kovács L, Péntek M. Association of Children's Type 1 Diabetes with Parents' Capability Well-Being Assessed By the ICECAP-A Measure. Value In Health, 2023;26(6):S313 doi: 10.1016/j.jval.2023.03.1787 [mtmt](#) [doi](#)

Zrubka Z. PICOTS-ComTeC: Keretrendszer a digitális egészségügyi intervenciók definiálásához. (2023) Magyar Egészség-gazdaságtani Társaság, XVII. META Konferencia, 2023. október 9. Budapest, url: <https://meta2023.ementin.hu/program/simplelist> [mtmt](#) [url](#)

Zrubka Z, Champion A, Holtorf A, Di Bidino R, Earla J, Boltyenkov A, Tabata-Kelly M, Asche C, Burrell A. Extending the PICOTS Framework for Evidence Syntheses of Digital Health Interventions: Results of a Delphi Consensus Study. (2023) ISPOR Europe Konferencia, 2023 November 12-15. Koppenhága, 13.45-14.45 Szekció: 233, Advancements in Digital Health Interventions: Evidence Syntheses, Value Assessment, and Global Perspectives, url: <https://www.ispor.org/conferences-education/conferences/upcoming-conferences/ispor-europe-2023/program/program/?date=11-14> [mtmt](#) [url](#)

Zrubka Z. Assessing the Value of Digital Health Technologies. (2023) International Market Access Society (IMAS) Access Europe 2023 Conference, 2023 Oct 2-4 Budapest, Hungary, Panel workshop: Assessing the Value of Digital Health Technologies Oct 4, 13.00-14.15, url: https://s7.goeshow.com/imas/emea/2023/conference_program_sessions.cfm [mtmt](#) [url](#)

Champion A, Zrubka Z, Holtorf A, Di B, Earla J, Boltyenkov A, Tabata-Kelly M, Asche C, Burrell A. TOWARDS A MINIMUM INFORMATION SET NEEDED TO DEFINE PATIENT-FACING DIGITAL HEALTH TECHNOLOGY FOR OUTCOMES RESEARCH. Value In Health, 2023;26(6):S271 url: <https://www.webofscience.com/wos/woscc/full-record/WOS:001031473301608> [mtmt](#) [url](#)

Á H, Zrubka Z, Luczay A, Tóth-Heyn P, Muzslay E, Szabó A, Világos E, Gulácsi L, Kovács L, Péntek M. Digital Health Literacy of Parents and Health-Related Quality of Life of Their Children with Type 1 Diabetes Mellitus. Value In Health, 2023;26(6):S349 doi: 10.1016/j.jval.2023.03.2380 [mtmt](#) [doi](#)

Pénzes J, Salamon A, Zrubka Z, Szerencsés D. A mesterséges intelligencia szerepe a betegegyógyításban: Veszély vagy lehetőség, hogy a ChatGPT jellegű szoftvereket kérdezzük meg női egészséggel, nőgyógyászati problémákkal kapcsolatos információkról a szakemberek helyett, mellett? Milyen megoldásokat várnának a

betegek, betegszervezetek a piaci résztve... (2023) VI. Health 2.0 Hungary Chapter Meeting, 2023. November 9. Semmelweis Egyetem, Budapest, Üllői út 26., [mtmt](#)

Muzslay E, Luczay A, Tóth-Heyn P, Világos E, Hölgyesi Á, Szabó A, Kovács L, Gulácsi L, Zrubka Z, Péntek M. Az 1-es típusú cukorbetegség miatt kezelt gyermekeket gondozó szülők elektronikus egészségműveltsége: összefüggés a betegségkezeléssel és a kimenetellel. (2023) Megjelent: MGYT-MDT Gyermekdiabetes Szekció XXXVII. Kongresszusa [mtmt](#)

Zsombor Z. An Evidence Analysis Framework for Digital Health. (2023) ISPOR Europe Konferencia, 2023 November 12-15. Koppenhága, Breakout session, Discussants: Artem Boltyenkov, Rossella DiBidino, Anke-Peggy Holtorf, url: <https://www.ispor.org/conferences-education/conferences/upcoming-conferences/ispor-europe-2023/program/program/?date=11-15> [mtmt](#) [url](#)

2022

Journal article

Burrell A et al. How Useful Are Digital Health Terms for Outcomes Research? An ISPOR Special Interest Group Report. Value In Health, 2022;25(9):1469 doi: 10.1016/j.jval.2022.04.1730 (Cit: 3; Scimago D1) [mtmt](#) [doi](#)

Motahari-Nezhad H, Fgaier M, Mahdi Abid M, Péntek M, Gulácsi L, Zrubka Z. Digital Biomarker-Based Studies: Scoping Review of Systematic Reviews. JMIR Mhealth And Uhealth, 2022;10(10): doi: 10.2196/35722 (Cit: 10; Scimago Q1) [mtmt](#) [doi](#)

Hölgyesi Á, Poór G, Baji P, Zrubka Z, Farkas M, Dobos Á, Gulácsi L, Kovács L, Péntek M. Validation of the Musculoskeletal Health Questionnaire in a general population sample: a cross-sectional online survey in Hungary. BMC Musculoskeletal Disorders, 2022;23(1): doi: 10.1186/s12891-022-05716-9 (Cit: 1; Scimago Q2) [mtmt](#) [doi](#)

Zrubka Z, Csabai I, Hermann Z, Golicki D, Prevolnik-Rupel V, Ogorevc M, Gulácsi L, Péntek M. Predicting Patient-Level 3-Level Version of EQ-5D Index Scores From a Large International Database Using Machine Learning and Regression Methods. Value In Health, 2022;25(9):1590 doi: 10.1016/j.jval.2022.01.024 (Cit: 5; Scimago D1) [mtmt](#) [doi](#)

Zrubka Z, Vékás P, Németh P, Dobos Á, Hajdu O, Kovács L, Gulácsi L, Hibbard J, Péntek M. Validation of the PAM-13 instrument in the Hungarian general population 40 years old and above. European Journal Of Health Economics, 2022;23(8):1341 doi: 10.1007/s10198-022-01434-0 (Cit: 6; Scimago D1) [mtmt](#) [doi](#)

Hermann Z, Péntek M, Gulácsi L, Kopcsóné Németh I, Zrubka Z. Measuring the acceptability of EQ-5D-3L health states for different ages. European Journal Of Health Economics, 2022;23():1243 doi: 10.1007/s10198-021-01424-8 (Cit: 2; Scimago D1) [mtmt](#) [doi](#)

Vladimir Z, Anita B, Carl A, Zsombor Z. Paying for Digital Health Interventions – What Evidence is Needed?. Acta Polytechnica Hungarica, 2022;19(9):179 doi: 10.12700/APH.19.9.2022.9.10 (Cit: 1; Scimago Q2) [mtmt](#) [doi](#)

Motahari-Nezhad H, Al-Abdulkarim H, Fgaier M, Abid M, Péntek M, Gulácsi L, Zrubka Z. Digital Biomarker–Based Interventions. *Journal Of Medical Internet Research*, 2022;24(12): doi: 10.2196/41042 (Cit: 8; Scimago D1) [mtmt](#) [doi](#)

Zrubka Z, Kincses Á, Ferenci T, Kovács L, Gulácsi L, Péntek M. Comparing actuarial and subjective healthy life expectancy estimates: A cross-sectional survey among the general population in Hungary. *PLOS One*, 2022;17(3):e0264708 doi: 10.1371/journal.pone.0264708 (Cit: 2; Scimago Q1) [mtmt](#) [doi](#)

Zrubka Z, Péntek M, Mhanna L, Abu-Zahra T, Mahdi-Abid M, Fgaier M, El-Dahiyat F, Al-Abdulkarim H, Drummond M, Gulácsi L. Disease-Related Costs Published in The Middle East and North Africa Region: Systematic Review and Analysis of Transferability. *Pharmacoeconomics*, 2022;40(6):587 doi: 10.1007/s40273-022-01146-6 (Cit: 6; Scimago D1) [mtmt](#) [doi](#)

Conference paper

Zsombor Z, László G, Márta P. Time to start using checklists for reporting artificial intelligence in health care and biomedical research: a rapid review of available tools. (2022) Megjelent: 2022 IEEE 26th International Conference on Intelligent Engineering Systems (INES 2022) pp. 15-20 url: <https://doi.org/10.1109/INES56734.2022.9922639> [mtmt](#) [doi](#)

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