

## Documents

- 1) Jesus-Oliveira, P., Silva-Couto, L., Pinho, N., Da Silva-Ferreira, A.T., Saboia-Vahia, L., Cuervo Silva, A., Pinto, E.F.

**Identification of Immunodominant Proteins of the Leishmania (Viannia) naiffi SubProte Targets against Leishmaniasis**  
(2023) *Vaccines*, 11 (7), art. no. 1129, .

- 2) Kanse, S., Khandelwal, M., Pandey, R.K., Khokhar, M., Desai, N., Kumbhar, B.V.

**Designing a Multi-Epitope Subunit Vaccine against VP1 Major Coat Protein of JC Polyo**  
(2023) *Vaccines*, 11 (7), art. no. 1182, .

- 3) Tîrziu, A., Avram, S., Madă, L., Crișan-Vida, M., Popovici, C., Popovici, D., Faur, C., Duda-Se C.

**Design of a Synthetic Long Peptide Vaccine Targeting HPV-16 and -18 Using Immunoin**  
(2023) *Pharmaceutics*, 15 (7), art. no. 1798, .

- 4) Kim, M., Savsani, K., Dakshanamurthy, S.

**A Peptide Vaccine Design Targeting KIT Mutations in Acute Myeloid Leukemia**  
(2023) *Pharmaceutics*, 16 (7), art. no. 932, .

- 5) Ruaro-Moreno, M., Monterrubio-López, G.P., Reyes-Gastellou, A., Castelán-Vega, J.A., Jiménez Ozores, G., Delgadillo-Gutiérrez, K., González-Y-Merchand, J.A., Ribas-Aparicio, R.M.

**Design of a Multi-Epitope Vaccine against Tuberculosis from Mycobacterium tuberculo PE\_PGRS56 Proteins by Reverse Vaccinology**  
(2023) *Microorganisms*, 11 (7), art. no. 1647, .

- 6) Ayub, F., Ahmed, H., Sohail, T., Shahzad, K., Celik, F., Wang, X., Simsek, S., Cao, J.

**Bioinformatics-based prediction and screening of immunogenic epitopes of Toxoplasma**

## **21 and 22 as candidate vaccine target**

(2023) *Heliyon*, 9 (7), art. no. e18176, .

- 7) Motamedi, H., Alvandi, A., Fathollahi, M., Ari, M., Moradi, S., Moradi, J., Abiri, R.

### **In silico designing and immunoinformatics analysis of a novel peptide vaccine against and IMP) variants**

(2023) *PLoS ONE*, 18 (7 July), art. no. e0275237, .

- 8) Satvati, S., Ghasemi, Y., Najafipour, S., Eskandari, S., Mahmoodi, S., Nezafat, N., Hashemza

### **Finding and engineering the newly found bacterial superoxide dismutase enzyme to in and decrease the immunogenicity: a computational and experimental research**

(2023) *Archives of Microbiology*, 205 (7), art. no. 260, .

- 9) Shawan, M.M.A.K., Sharma, A.R., Halder, S.K., Arian, T.A., Shuvo, M.N., Sarker, S.R., Hasar

### **Advances in Computational and Bioinformatics Tools and Databases for Designing and Based Peptide Vaccine**

(2023) *International Journal of Peptide Research and Therapeutics*, 29 (4), art. no. 60, .

- 10) Bhattacharya, M., Alshammari, A., Alharbi, M., Dhama, K., Lee, S.-S., Chakraborty, C.

### **A novel mutation-proof, next-generation vaccine to fight against upcoming SARS-CoV-2 designed through AI enabled approaches and tools, along with the machine learning vaccine breakthrough**

(2023) *International Journal of Biological Macromolecules*, 242, art. no. 124893, .

- 11) Siddiki, A.Z., Alam, S., Tithi, F.A., Hoque, S.F., Sajib, E.H., Bin Hossen, F.F., Hossain, M.A.

### **Construction of a multi-epitope in silico vaccine against Anaplasma Marginale using i**

(2023) *Biocatalysis and Agricultural Biotechnology*, 50, art. no. 102706, .

- 12) Ojha, R., Singh, S., Gupta, N., Kumar, K., Padhi, A.K., Prajapati, V.K.

### **Multi-pathogen based chimeric vaccine to fight against COVID-19 and concomitant cc**

(2023) *Biotechnology Letters*, 45 (7), pp. 779-797.

- 13) Kumar, S., Kumari, K., Azad, G.K.

### **An immunoinformatics approach to study the epitopes of SARS-CoV-2 helicase, Nsp1**

inmunoinformático Para estudiar los epítopes de la helicasa de SARS-CoV-2, Nsp13] (2023) *Vacunas*, 24 (3), pp. 190-202.

14) Bzówka, M., Bagrowska, W., Góra, A.

**Recent Advances in Studying Toll-like Receptors with the Use of Computational Meth**  
(2023) *Journal of Chemical Information and Modeling*, 63 (12), pp. 3669-3687.

15) Roja, B., Saranya, S., Chellapandi, P.

**Discovery of novel virulence mechanisms in Clostridium botulinum type A3 using ge**  
(2023) *Gene*, 869, art. no. 147402, .

16) Nguyen, C.M., Luong, B.A., Thi Tran, T.T., Nguyen, H.N., Tran, L.S.

**Design and generation of mRNAs encoding conserved regions of SARS-CoV-2 ORF1a activation**  
(2023) *Future Virology*, 18 (8), pp. 501-516.

17) Tongco, A.M.P., Rivera, W.L.

**Design of a multi-epitope subunit vaccine candidate for chikungunya virus using com**  
(2023) *Tropical Biomedicine*, 40 (2), pp. 129-137.

18) Ameen, Z.S., Mostafa, H., Ozsahin, D.U., Mubarak, A.S.

**Accelerating SARS-CoV-2 Vaccine Development: Leveraging Novel Hybrid Deep Lear**  
**Bioinformatics Analysis for Epitope Selection and Classification**  
(2023) *Processes*, 11 (6), art. no. 1829, .

19) Inácio, M.M., Moreira, A.L.E., Cruz-Leite, V.R.M., Mattos, K., Silva, L.O.S., Venturini, J., Rui: S.S., Soares, C.M.D.A., Borges, C.L.

**Fungal Vaccine Development: State of the Art and Perspectives Using Immunoinform**  
(2023) *Journal of Fungi*, 9 (6), art. no. 633, .

20) Zhang, Y., Zhao, G., Xiong, Y., Li, F., Chen, Y., Cheng, Y., Ma, J., Wang, H., Yan, Y., Wang, Z

**Development of a Universal Multi-Epitope Vaccine Candidate against Streptococcus s**  
**Immunoinformatics Approaches**  
(2023) *Veterinary Sciences*, 10 (6), art. no. 383, .

21) Khamjan, N.A., Lohani, M., Khan, M.F., Khan, S., Algaissi, A.

**Immunoinformatics Strategy to Develop a Novel Universal Multiple Epitope-Based CC**  
(2023) *Vaccines*, 11 (6), art. no. 1090, .

22) Irudal, S., Scoffone, V.C., Trespidi, G., Barbieri, G., D'Amato, M., Viglio, S., Pizza, M., Scars

**Identification by Reverse Vaccinology of Three Virulence Factors in Burkholderia cen**  
**Ideal Vaccine Antigens**  
(2023) *Vaccines*, 11 (6), art. no. 1039, .

23) Duay, S.S., Yap, R.C.Y., Gaitano, A.L., III, Santos, J.A.A., Macalino, S.J.Y.

**Roles of Virtual Screening and Molecular Dynamics Simulations in Discovering and U**  
**Drugs**  
(2023) *International Journal of Molecular Sciences*, 24 (11), art. no. 9289, .

24) Chatterjee, D., Al Rimon, R., Chowdhury, U.F., Islam, M.R.

**A multi-epitope based vaccine against the surface proteins expressed in cyst and tro**  
**Entamoeba histolytica**  
(2023) *Journal of Immunological Methods*, 517, art. no. 113475, .

25) de Oliveira Matos, A., Vilela Rodrigues, T.C., Tiwari, S., dos Santos Dantas, P.H., Sartori, G.  
Martins Da Silva, J.H., de Castro Soares, S., Silva-Sales, M., Sales-Campos, H.

**Immunoinformatics-guided design of a multi-valent vaccine against Rotavirus and No**  
(2023) *Computers in Biology and Medicine*, 159, art. no. 106941, .

26) Ullah, A., Waqas, M., Aziz, S., Rahman, S.U., Khan, S., Khalid, A., Abdalla, A.N., Uddin, J., I  
A.

**Bioinformatics and immunoinformatics approach to develop potent multi-peptide vac**  
**capable of eliciting cellular and humoral immune response**  
(2023) *International Journal of Biological Macromolecules*, 239, art. no. 124320, .

27) Chehelgerdi, M., Heidarnia, F., Dehkordi, F.B., Chehelgerdi, M., Khayati, S., Khorramian-Gh  
Kabiri, H.

**Immunoinformatic prediction of potential immunodominant epitopes from cagW in or**

**against *Helicobacter pylori* infection based on experimental consequences**  
(2023) *Functional and Integrative Genomics*, 23 (2), art. no. 107, .

28) Mahmoudvand, S., Esmaeili Gouvarchin Ghaleh, H., Jalilian, F.A., Farzanehpour, M., Dorost

**Design of a multi-epitope-based vaccine consisted of immunodominant epitopes of s**  
**CoV-2 using immunoinformatics approach**

(2023) *Biotechnology and Applied Biochemistry*, 70 (3), pp. 1189-1205.

29) Mohammadi, Y., Nezafat, N., Negahdaripour, M., Eskandari, S., Zamani, M.

**In silico design and evaluation of a novel mRNA vaccine against BK virus: a reverse v**  
(2023) *Immunologic Research*, 71 (3), pp. 422-441.

30) Shahab, M., Guo, D., Zheng, G., Zou, Y.

**Design of a Novel and Potent Multi-Epitope Chimeric Vaccine against Human Papillon**  
**Immunoinformatics Approach**

(2023) *Biomedicines*, 11 (5), art. no. 1493, .

31) Malaina, I., Gonzalez-Melero, L., Martínez, L., Salvador, A., Sanchez-Diez, A., Asumendi, A., Pujante, J., Legarreta, L., García, M.A., Pérez-Pinilla, M.B., Izu, R., Martínez de la Fuente, I, Hernandez, R.M., Boyano, M.D.

**Computational and Experimental Evaluation of the Immune Response of Neoantigens**  
**Design**

(2023) *International Journal of Molecular Sciences*, 24 (10), art. no. 9024, .

32) Sanami, S., Nazarian, S., Ahmad, S., Raeisi, E., ul Qamar, M.T., Tahmasebian, S., Pazoki-T Samani, M.

**In silico design and immunoinformatics analysis of a universal multi-epitope vaccine**  
(2023) *PLoS ONE*, 18 (5 May), art. no. e0286224, .

33) Nasir, S.N., Iftikhar, A., Zubair, F., Alshammari, A., Alharbi, M., Alasmari, A.F., Khan, A., Was Waheed, Y., Wei, D.-Q.

**Structural vaccinology-based design of multi-epitopes vaccine against *Streptococcus***  
**using molecular modeling and immune simulation approaches**

(2023) *Heliyon*, 9 (5), art. no. e16148, .

34) Mahmoodi, S., Amirzakaria, J.Z., Ghasemian, A.

**In silico design and validation of a novel multiepitope vaccine candidate against structural proteins of Chikungunya virus using comprehensive immunoinformatics analyses**  
(2023) *PLoS ONE*, 18 (5 MAY), art. no. e0285177, .

35) Rahmani, F., Imani Fooladi, A.A., Ajoudanifar, H., Soleimani, N.A.

**In silico and experimental methods for designing a potent anticancer arazyme-herceptin positive breast cancer vaccine**  
(2023) *Journal of Molecular Modeling*, 29 (5), art. no. 160, .

36) Bhardwaj, P., Behera, S.P., Nanaware, N., Zaman, K., Deval, H., Kant, R., Kulkarni, S., Kumar, S.

**Phylogenetic and immunological investigations of complete TSA56 ORF of Orientia tsutsugamushi encephalitis syndrome cases from eastern Uttar Pradesh, India**  
(2023) *Archives of Microbiology*, 205 (5), art. no. 178, .

37) Poudel, S., Jia, L., Arick, M.A., II, Hsu, C.-Y., Thrash, A., Sukumaran, A.T., Adhikari, P., Kieser, J.

**In silico prediction and expression analysis of vaccine candidate genes of Campylobacter jejuni**  
(2023) *Poultry Science*, 102 (5), art. no. 102592, .

38) Zheng, X., Xu, S., Wang, Z., Tao, X., Liu, Y., Dai, L., Li, Y., Zhang, W.

**Sifting through the core-genome to identify putative cross-protective antigens against SARS-CoV-2**  
(2023) *Applied Microbiology and Biotechnology*, 107 (9), pp. 3085-3098.

39) Sarkar, P., Banerjee, S., Chakrabarti, S., Chakrabarti, P., Bandyopadhyay, A., Mitra, A.G., Sengupta, S.

**Genome characterization, phylogenomic assessment and spatio-temporal dynamics of SARS-CoV-2 variants from India**  
(2023) *Indian Journal of Medical Microbiology*, 43, pp. 66-72.

40) Pandian, C.J., Murugan, N.A., Rajendren, S.M., Jeyaraman, J.

**Computer-Aided vaccine design for selected positive-sense single stranded RNA viruses**  
(2023) *Indian Journal of Biochemistry and Biophysics*, 60 (4), pp. 281-296.

41) Rodrigues-da-Silva, R.N., Conte, F.P., da Silva, G., Carneiro-Alencar, A.L., Gomes, P.R., Kuhlmann, J.C.

**Identification of B-Cell Linear Epitopes in the Nucleocapsid (N) Protein B-Cell Linear Epitope in the Main SARS-CoV-2 Variants**

(2023) *Viruses*, 15 (4), art. no. 923, .

- 42) Kakakhel, S., Ahmad, A., Mahdi, W.A., Alshehri, S., Aiman, S., Begum, S., Shams, S., Kama Khan, A.

**Annotation of Potential Vaccine Targets and Designing of mRNA-Based Multi-Epitope Disease Virus via Reverse Vaccinology and Agent-Based Modeling**

(2023) *Bioengineering*, 10 (4), art. no. 430, .

- 43) Jiang, Z., Kang, X., Song, Y., Zhou, X., Yue, M.

**Identification and Evaluation of Novel Antigen Candidates against Salmonella Pullorum Vaccinology**

(2023) *Vaccines*, 11 (4), art. no. 865, .

- 44) Jiang, F., Peng, C., Cheng, P., Wang, J., Lian, J., Gong, W.

**PP19128R, a Multiepitope Vaccine Designed to Prevent Latent Tuberculosis Infection, In Silico and In Vitro Assays**

(2023) *Vaccines*, 11 (4), art. no. 856, .

- 45) Naveed, M., Waseem, M., Aziz, T., Hassan, J.U., Makhdoom, S.I., Ali, U., Alharbi, M., Alsaifi, A.

**Identification of Bacterial Strains and Development of an mRNA-Based Vaccine to Combat Staphylococcus aureus via In Vitro and In Silico Approaches**

(2023) *Biomedicines*, 11 (4), art. no. 1039, .

- 46) Usman, M., Ayub, A., Habib, S., Rana, M.S., Rehman, Z., Zohaib, A., Jamal, S.B., Jaiswal, P., Azevedo, V., Faheem, M., Javed, A.

**Vaccinomics Approach for Multi-Epitope Vaccine Design against Group A Rotavirus Using**

(2023) *Vaccines*, 11 (4), art. no. 726, .

- 47) Dobrut, A., Młodzińska, A., Drożdż, K., Wójcik-Grzybek, D., Michalak, K., Pietras-Ożga, D., I Brzychczy-Włoch, M.

**The Two-Track Investigation of Fibronectin Binding Protein A of Staphylococcus aureus as a Potential Candidate for Immunodiagnosis: A Pilot Study**

(2023) *International Journal of Molecular Sciences*, 24 (7), art. no. 6569, .

48) Bhattacharjee, M., Banerjee, M., Mukherjee, A.

**In silico designing of a novel polyvalent multi-subunit peptide vaccine leveraging cross-reactivity for visceral and cutaneous leishmaniasis: an immunoinformatics-based approach**  
(2023) *Journal of Molecular Modeling*, 29 (4), art. no. 99, .

49) Chatterjee, R., Mahapatra, S.R., Dey, J., Raj Takur, K., Raina, V., Misra, N., Suar, M.

**An immunoinformatics and structural vaccinology study to design a multi-epitope vaccine against *Staphylococcus aureus* infection**  
(2023) *Journal of Molecular Recognition*, 36 (4), art. no. e3007, .

50) Oladipo, E.K., Akindiya, O.E., Oluwasanya, G.J., Akanbi, G.M., Olufemi, S.E., Adediran, D.A., R.O., Kolapo, K.T., Oluwasegun, J.A., Awobiyi, H.O., Jimah, E.M., Irewolede, B.A., Folakanran, Akintibubo, S.A., Odunlami, F.D., Ojo, T.O., Akinro, O.P., Hezekiah, O.S., Olayinka, A.T., Abia, J.A., Ikuomola, M.O., Adegoke, H.M., Idowu, U.A., Olaniyan, O.P., Bamigboye, O.O., Akinde

**Bioinformatics analysis of structural protein to approach a vaccine candidate against *Leishmania***  
(2023) *Immunogenetics*, 75 (2), pp. 99-114.

51) Jalal, K., Khan, K., Uddin, R.

**Immunoinformatic-guided designing of multi-epitope vaccine construct against *Brucella***  
(2023) *Immunologic Research*, 71 (2), pp. 247-266.

52) Zakeri, F., Latifi-Navid, H., Soheili, Z.-S., Sadeghi, M., Arab, S.S., Samiei, S., Pirmardan, E.F., H., Hafezi-Moghadam, A.

**Design, construction and in vivo functional assessment of a hinge truncated sFLT01**  
(2023) *Gene Therapy*, 30 (3-4), pp. 347-361.

53) Kumar, P., Shiraz, M., Akif, M.

**Multiepitope-based vaccine design by exploring antigenic potential among leptospira using comprehensive immunoinformatics and structure-based approaches**  
(2023) *Biotechnology and Applied Biochemistry*, 70 (2), pp. 670-687.

54) Lu, L., Ma, W., Johnson, C.H., Khan, S.A., Irwin, M.L., Pusztai, L.

**In silico designed mRNA vaccines targeting CA-125 neoantigen in breast and ovarian cancer**  
(2023) *Vaccine*, 41 (12), pp. 2073-2083.



55) Mirabent-Casals, M., Caña-Bozada, V.H., Morales-Serna, F.N., García-Gasca, A.

**Predicted Secretome of the Monogenean Parasite *Rhabdosynochus viridisi*: Hypothesis for Host-Parasite Interactions**

(2023) *Parasitologia*, 3 (1), pp. 33-45.

56) Prudencio, C.R., Gomes da Costa, V., Rocha, L.B., da Costa, H.H.M., Orts, D.J.B., da Silva N.A.B., da Conceição, P.J.P., Bittar, C., Machado, R.R.G., Durigon, E.L., Araujo, J.P., Jr., Po Oliveira, J.A., Mitsunari, T., Pereira, L.R., Andreato-Santos, R., de Souza Ferreira, L.C., Luz

**Identification of Zika Virus NS1-Derived Peptides with Potential Applications in Serologic**

(2023) *Viruses*, 15 (3), art. no. 654, .

57) Ikram, A., Alzahrani, B., Zaheer, T., Sattar, S., Rasheed, S., Aurangzeb, M., Ishaq, Y.

**An In Silico Deep Learning Approach to Multi-Epitope Vaccine Design: A Hepatitis E Virus**

(2023) *Vaccines*, 11 (3), art. no. 710, .

58) Padma, S., Patra, R., Sen Gupta, P.S., Panda, S.K., Rana, M.K., Mukherjee, S.

**Cell Surface Fibroblast Activation Protein-2 (Fap2) of *Fusobacterium nucleatum* as a Potential Therapeutic Intervention of Human Colorectal Cancer: An Immunoinformatics Approach**

(2023) *Vaccines*, 11 (3), art. no. 525, .

59) Krishnamoorthy, H.R., Karuppasamy, R.

**Design and In Silico Validation of a Novel MZF-1-Based Multi-Epitope Vaccine to Combat Breast Cancer**

(2023) *Vaccines*, 11 (3), art. no. 577, .

60) Ferreira-Sena, E.P., Hardoim, D.D.J., Cardoso, F.D.O., d'Escoffier, L.N., Soares, I.F., Carvalho Fragoso, S.P., Alves, C.R., De-Simone, S.G., Lima-Junior, J.D.C., Bertho, A.L., Zaverucha-Calabrese, K.D.S.

**A New Strategy for Mapping Epitopes of LACK and PEPCK Proteins of *Leishmania amazonensis* and Histocompatibility Complex Class II**

(2023) *International Journal of Molecular Sciences*, 24 (6), art. no. 5972, .

61) Mahapatra, S.R., Dey, J., Raj, T.K., Misra, N., Suar, M.

**Designing a Next-Generation Multiepitope-Based Vaccine against Staphylococcus aureus: Vaccinology Approaches**

(2023) *Pathogens*, 12 (3), art. no. 376, .

- 62) Srivastava, S., Verma, S., Kamthania, M., Saxena, A.K., Pandey, K.C., Pande, V., Kolbe, M.

**Exploring the structural basis to develop efficient multi-epitope vaccines displaying it and TLR3 molecules to prevent NIPAH infection, a global threat to human health**

(2023) *PLoS ONE*, 18 (3 March), art. no. e0282580, .

- 63) Goodswen, S.J., Kennedy, P.J., Ellis, J.T.

**A guide to current methodology and usage of reverse vaccinology towards in silico v**

(2023) *FEMS Microbiology Reviews*, 47 (2), art. no. fuad004, .

- 64) Padavu, S., Kumar, B.K., Kumar, A., Rai, P.

**In-silico Analysis of Human Papillomavirus - 45 E6, E7 & L1 Proteins as Potential Imm**

(2023) *Journal of Pure and Applied Microbiology*, 17 (1), pp. 554-566.

- 65) Paranthaman, P., Veerappapillai, S.

**Design of a potential Sema4A-based multi-epitope vaccine to combat triple-negative breast immunoinformatic approach**

(2023) *Medical Oncology*, 40 (3), art. no. 105, .

- 66) Schroeder, S.M., Nelde, A., Walz, J.S.

**Viral T-cell epitopes – Identification, characterization and clinical application**

(2023) *Seminars in Immunology*, 66, art. no. 101725, .

- 67) Dobrut, A., Wójcik-Grzybek, D., Młodzińska, A., Pietras-Ożga, D., Michalak, K., Tabacki, A., Włoch, M.

**Detection of immunoreactive proteins of Escherichia coli, Streptococcus uberis, and isolated from cows with diagnosed mastitis**

(2023) *Frontiers in Cellular and Infection Microbiology*, 13, art. no. 987842, .

- 68) Huang, H.-L., Weng, C.-H., Nordling, T.E.M., Liou, Y.-F.

**ThermalProGAN: A sequence-based thermally stable protein generator trained using unp**  
(2023) *Journal of Bioinformatics and Computational Biology*, 21 (1), art. no. 2350008, .

69) Hashimi, T., Joyce, D., Nasir, S.M., Masarudin, M.J., Salleh, A., Othman, S.

**Characterisation of the Putative Antigenic Genes of the Outer Membrane Proteins of I Strain PMTB2.1 through in silico Analysis**

(2023) *Pertanika Journal of Tropical Agricultural Science*, 46 (1), pp. 277-313.

70) Akhtar, N., Magdaleno, J.S.L., Ranjan, S., Wani, A.K., Grewal, R.K., Oliva, R., Shaikh, A.R.,

**Secreted Aspartyl Proteinases Targeted Multi-Epitope Vaccine Design for Candida du Immunoinformatics**

(2023) *Vaccines*, 11 (2), art. no. 364, .

71) Bakkari, M.A.

**Targeted Protein-Specific Multi-Epitope-Based Vaccine Designing against Human Cyt Immunoinformatics Approaches**

(2023) *Vaccines*, 11 (2), art. no. 203, .

72) Malik, M., Khan, S., Ullah, A., Hassan, M., Haq, M.U., Ahmad, S., Al-Harbi, A.I., Sanami, S., Khurram, M.

**Proteome-Wide Screening of Potential Vaccine Targets against Brucella melitensis**

(2023) *Vaccines*, 11 (2), art. no. 263, .

73) Umitaibatin, R., Harisna, A.H., Jauhar, M.M., Syaifie, P.H., Arda, A.G., Nugroho, D.W., Ramad Shalannanda, W., Anshori, I.

**Immunoinformatics Study: Multi-Epitope Based Vaccine Design from SARS-CoV-2 Sp**

(2023) *Vaccines*, 11 (2), art. no. 399, .

74) Margaroni, M., Agallou, M., Tsanaktsidou, E., Kammona, O., Kiparissides, C., Karagouni, E.

**Immunoinformatics Approach to Design a Multi-Epitope Nanovaccine against Leishm Cellular Immune Responses**

(2023) *Vaccines*, 11 (2), art. no. 304, .

75) Ataide, L.S., de Moraes Maia, F., Conte, F.P., Isaac, L., Barbosa, A.S., da Costa Lima-Junior da-Silva, R.N.

**Sph2(176–191) and Sph2(446–459): Identification of B-Cell Linear Epitopes in Sphingomy Recognized by Patients Infected by Pathogenic Leptospires**  
(2023) *Vaccines*, 11 (2), art. no. 359, .

76) Ismail, M., Bai, B., Guo, J., Bai, Y., Sajid, Z., Muhammad, S.A., Shaikh, R.S.

**Experimental Validation of MHC Class I and II Peptide-Based Potential Vaccine Candid Virus Using Sprague-Dawly Models**  
(2023) *Molecules*, 28 (4), art. no. 1687, .

77) Almeida, P.C.S., Roque, B.S., Felice, A.G., Jaiswal, A.K., Tiwari, S., Azevedo, V., Silva-Verg Ferreira-Paim, K., Fonseca, F.M.

**Comparative Genomics of Histoplasma capsulatum and Prediction of New Vaccines a**  
(2023) *Journal of Fungi*, 9 (2), art. no. 193, .

78) Salod, Z., Mahomed, O.

**VPAGs-Dataset4ML: A Dataset to Predict Viral Protective Antigens for Machine Learni Vaccinology**  
(2023) *Data*, 8 (2), art. no. 41, .

79) Girija, A.S.S., Gunasekaran, S., Habib, S., Aljeldah, M., Al Shammari, B.R., Alshehri, A.A., A S.A., Alawfi, A., Alshengeti, A., Garout, M., Alwarthan, S., Alsubki, R.A., Moustafa, N.M., Rat

**Prediction of Putative Epitope Peptides against BaeR Associated with TCS Adaptation Using an In Silico Approach**  
(2023) *Medicina (Lithuania)*, 59 (2), art. no. 343, .

80) Shahab, M., Alzahrani, A.K., Duan, X., Aslam, M., Abida, Imran, M., Kamal, M., Alam, M.T., Z

**An Immunoinformatics Approach to Design Novel and Potent Multi-Epitope-Based Va Disease**  
(2023) *Biomedicines*, 11 (2), art. no. 398, .

81) Añonuevo, A.M., Gomez, M., Tayo, L.L.

**In silico de novo drug design of a therapeutic peptide inhibitor against UBE2C in brea**  
(2023) *Journal of Bioinformatics and Computational Biology*, 21 (1), art. no. 2250029, .

82) Jiang, F., Liu, Y., Xue, Y., Cheng, P., Wang, J., Lian, J., Gong, W.

**Developing a multiepitope vaccine for the prevention of SARS-CoV-2 and monkeypox vaccinology analysis**

(2023) *International Immunopharmacology*, 115, art. no. 109728, .

83) Waqas, M., Aziz, S., Bushra, A., Halim, S.A., Ali, A., Ullah, S., Khalid, A., Abdalla, A.N., Khar

**Employing an immunoinformatics approach revealed potent multi-epitope based subch**  
**chioriomeningitis virus**

(2023) *Journal of Infection and Public Health*, 16 (2), pp. 214-232.

84) Singh, S., Rao, A., Kumar, K., Mishra, A., Prajapati, V.K.

**Translational vaccinomics and structural filtration algorithm to device multiepitope va**  
**monkeypox virus**

(2023) *Computers in Biology and Medicine*, 153, art. no. 106497, .

85) Das, N.C., Gupta, P.S.S., Panda, S.K., Rana, M.K., Mukherjee, S.

**Reverse vaccinology assisted design of a novel multi-epitope vaccine to target Wuch**  
**immunoinformatics approach**

(2023) *International Immunopharmacology*, 115, art. no. 109639, .

86) Ghosh, P., Patra, P., Mondal, N., Chini, D.S., Patra, B.C.

**Multi Epitopic Peptide Based Vaccine Development Targeting Immobilization Antigen**  
**A Computational Approach**

(2023) *International Journal of Peptide Research and Therapeutics*, 29 (1), art. no. 11, .

87) Barh, D., Tiwari, S., Rodrigues Gomes, L.G., Ramalho Pinto, C.H., Andrade, B.S., Ahmad, S  
K.J., Banjer, H.J., Hassan, S.S., Redwan, E.M., Raza, K., Góes-Neto, A., Sabino-Silva, R., I  
Azevedo, V., Tambuwala, M.M.

**SARS-CoV-2 Variants Show a Gradual Declining Pathogenicity and Pro-Inflammatory**  
**Increasing Antigenic and Anti-Inflammatory Cytokine Induction, and Rising Structural**  
**Number Genome-Based Approach**

(2023) *Inflammation*, 46 (1), pp. 297-312.

88) Rcheulishvili, N., Mao, J., Papukashvili, D., Liu, C., Wang, Z., Zhao, J., Xie, F., Pan, X., Ji, Y

**Designing multi-epitope mRNA construct as a universal influenza vaccine candidate f**

**preparedness**

(2023) *International Journal of Biological Macromolecules*, 226, pp. 885-899.

- 89) Cheng, P., Jiang, F., Wang, G., Wang, J., Xue, Y., Wang, L., Gong, W.

**Bioinformatics analysis and consistency verification of a novel tuberculosis vaccine**  
(2023) *Frontiers in Immunology*, 14, art. no. 1102578, .

- 90) Waqas, M., Aziz, S., Liò, P., Khan, Y., Ali, A., Iqbal, A., Khan, F., Almajhdi, F.N.

**Immunoinformatics design of multivalent epitope vaccine against monkeypox virus a membrane-bound, enveloped, and extracellular proteins as targets**  
(2023) *Frontiers in Immunology*, 14, art. no. 1091941, .

- 91) Gul, I., Hassan, A., Muneeb, J.M., Akram, T., Haq, E., Shah, R.A., Ganai, N.A., Ahmad, S.M

**A multiepitope vaccine candidate against infectious bursal disease virus using immunoinformatics and vaccinology approach**  
(2023) *Frontiers in Veterinary Science*, 9, art. no. 1116400, .

- 92) Khan, M.S., Khan, I.M., Ahmad, S.U., Rahman, I., Khan, M.Z., Khan, M.S.Z., Abbas, Z., Nor

**Immunoinformatics design of B and T-cell epitope-based SARS-CoV-2 peptide vaccine**  
(2023) *Frontiers in Immunology*, 13, art. no. 1001430, .

- 93) Long, Q., Wei, M., Wang, Y., Pang, F.

**Design of a multi-epitope vaccine against goatpox virus using an immunoinformatics approach**  
(2023) *Frontiers in Cellular and Infection Microbiology*, 13, art. no. 1309096, .

- 94) Rehman, H.M., Rehman, H.M., Ahmed, N., Amirzada, M.I., Aslam, S., Bashir, H.

**In silico Design and Evaluation of Novel Cell Targeting Melittin-Interleukin-24 Fusion I Candidate Against Breast Cancer [Reka Bentuk in silico dan Penilaian Penyasaran Se Melitin-Interleukin-24: Calon Dadah Berpotensi Melawan Kanser Payudara]**  
(2023) *Sains Malaysiana*, 52 (11), pp. 3223-3237.

- 95) Ma, S., Zhu, F., Xu, Y., Wen, H., Rao, M., Zhang, P., Peng, W., Cui, Y., Yang, H., Tan, C., Ch

**Development of a novel multi-epitope mRNA vaccine candidate to combat HMPV virus**  
(2023) *Human Vaccines and Immunotherapeutics*, 19 (3), art. no. 2293300, .

- 96) Chawla, M., Cuspoca, A.F., Akthar, N., Magdaleno, J.S.L., Rattanabunyong, S., Suwattanas Choowongkomon, K., Shaikh, A.R., Malik, T., Cavallo, L.

**Immunoinformatics-aided rational design of a multi-epitope vaccine targeting feline ir**  
(2023) *Frontiers in Veterinary Science*, 10, art. no. 1280273, .

- 97) Naveed, M., Jabeen, K., Aziz, T., Mughual, M.S., ul-Hassan, J., Sheraz, M., Rehman, H.M., Alasmari, A.F.

**Whole proteome analysis of MDR Klebsiella pneumoniae to identify mRNA and multip targets against emerging nosocomial and lungs associated infections**  
(2023) *Journal of Biomolecular Structure and Dynamics*, .

- 98) Miao, C., Cui, Y., Li, Y., Qi, Q., Shang, W., Chen, H., Gao, Y., Yuan, R., Long, Q., Wu, W., W

**Immunoinformatics Prediction and Protective Efficacy of Vaccine Candidate PiuA-Ply Pneumoniae**  
(2023) *Drug Design, Development and Therapy*, 17, pp. 3783-3801.

- 99) Magouz, A., El-Kon, I., Raya-Álvarez, E., Khaled, E., Alkhalefa, N., Alhegaili, A.S., El-khadra E.K.

**Molecular typing of canine parvovirus type 2 by VP2 gene sequencing and restriction polymorphism in affected dogs from Egypt**  
(2023) *Frontiers in Microbiology*, 14, art. no. 1254060, .

- 100) Almanaa, T.N.

**Design of a novel multi-epitopes vaccine against Escherichia fergusonii: a pan-prote**  
(2023) *Frontiers in Immunology*, 14, art. no. 1332378, .

- 101) Singh, P., Shaikh, S., Gupta, S., Gupta, R.

**In-silico development of multi-epitope subunit vaccine against lymphatic filariasis**  
(2023) *Journal of Biomolecular Structure and Dynamics*, .

- 102) Tamanna, T., Rahman, M.S.

**Leveraging immunoinformatics for developing a multi-epitope subunit vaccine againr**

**Fusobacterium nucleatum**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

- 103) Marques, P.H., Rodrigues, T.C.V., Santos, E.H., Bleicher, L., Aburjaile, F.F., Martins, F.S., C Tiwari, S., Soares, S.

**Design of a multi-epitope vaccine (vme-VAC/MST-1) against cholera and vibriosis ba and immunoinformatics approaches**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

- 104) Tai, C., Li, H., Zhang, J.

**BCEDB: a linear B-cell epitopes database for SARS-CoV-2**

(2023) *Database*, 2023, art. no. baad065, .

- 105) Jalalvand, A., Fotouhi, F., Bahramali, G., Bambai, B., Farahmand, B.

**In silico design of a trivalent multi-epitope global-coverage vaccine-candidate protei evaluation by molecular dynamics and immune system simulation**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

- 106) Amos, E.O., Araoyinbo, O.S., Akinleye, E.O., Alakanse, S.O., Bamikole, A.O., Kolawole, O.

**Immunoinformatics design of multi-epitope vaccine using surface cell antigen OmpI against rickettsioses**

(2023) *Informatics in Medicine Unlocked*, 43, art. no. 101411, .

- 107) Ali, S.L., Ali, A., Alamri, A., Baiduissenova, A., Dusmagambetov, M., Abduldayeva, A.

**Genomic annotation for vaccine target identification and immunoinformatics-guided design against Songling virus through screening its whole genome encoded protein**

(2023) *Frontiers in Immunology*, 14, art. no. 1284366, .

- 108) Mashraqi, M.M., Alzamami, A., Alturki, N.A., Almasaudi, H.H., Ahmed, I., Alshamrani, S., B

**Chimeric vaccine design against the conserved TonB-dependent receptor-like  $\beta$ -bari membrane *tbpA* and *hpuB* proteins of *Kingella kingae* ATCC 23330**

(2023) *Frontiers in Molecular Biosciences*, 10, art. no. 1258834, .

- 109) Choudhury, A., Chandra, A., Dawoud, T.M., Nafidi, H.-A., Singh, N., Bourhia, M.



**Immunoinformatics and reverse vaccinology approach in designing a novel highly immunopeptide-based vaccine against the human monkeypox virus**

(2023) *Frontiers in Molecular Biosciences*, 10, art. no. 1295817, .

- 110) Amin Rani, N., Moin, A.T., Patil, R., Barketullah Robin, T., Zubair, T., Nawal, N., Sami, M.R. M., Hossain, M., Zheng, C., Abul Manchur, M., Islam, N.N.

**Designing a polyvalent vaccine targeting multiple strains of varicella zoster virus us approaches**

(2023) *Frontiers in Microbiology*, 14, art. no. 1291868, .

- 111) Sun, B.-Z., Qin, C.-C., Zhang, J.-Q., Wang, Y.-K., Zhang, W.-B., Liu, R.-B., Bai, T.-Y., Zhang Jiang, D.-B.

**Prediction of T cell epitopes of Hantavirus glycoprotein Gn and cross species validation [胞表位预测及其跨种属验证]**

(2023) *Medical Journal of Chinese People's Liberation Army*, 48 (9), pp. 1000-1010.

- 112) Basheer, A., Jamal, S.B., Alzahrani, B., Faheem, M.

**Development of a tetravalent subunit vaccine against dengue virus through a vaccination**

(2023) *Frontiers in Immunology*, 14, art. no. 1273838, .

- 113) Shafaghi, M., Bahadori, Z., Barzi, S.M., Afshari, E., Madanchi, H., Mousavi, S.F., Shabani, .

**A new candidate epitope-based vaccine against PspA PhtD of *Streptococcus pneumoniae*: an experimental approach**

(2023) *Frontiers in Cellular and Infection Microbiology*, 13, art. no. 1271143, .

- 114) Xie, M., Sun, B., Ma, S., Yang, D., Luo, C., Wang, Y., Cao, Y., Kang, W., Zhang, Y., Yang, K

**Evaluation and validation on cellular immunoreactivity of Hantaan virus Gc [汉滩病毒证]**

(2023) *Journal of Army Medical University*, 45 (19), pp. 2007-2017.

- 115) Muhammad, S.A., Guo, J., Noor, K., Mustafa, A., Amjad, A., Bai, B.

**Pangenomic and immunoinformatics based analysis of Nipah virus revealed CD4+ a potential vaccine candidates**

(2023) *Frontiers in Pharmacology*, 14, art. no. 1290436, .

116) Jiang, F., Han, Y., Liu, Y., Xue, Y., Cheng, P., Xiao, L., Gong, W.

**A comprehensive approach to developing a multi-epitope vaccine against Mycobacterium tuberculosis: in silico design to in vitro immunization evaluation**

(2023) *Frontiers in Immunology*, 14, art. no. 1280299, .

117) Vaghasia, V., Lata, K.S., Patel, S., Das, J.

**Epitopes mapping for identification of potential cross-reactive peptide against leptospirosis**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

118) Sarfraz, A., Wara, T.U., Sheheryar, Chen, K., Ansari, S.H., Zaman, A., Nishan, U., Iqbal, A., Ojha, S.C.

**Structural informatics approach for designing an epitope-based vaccine against the**

(2023) *Frontiers in Immunology*, 14, art. no. 1284621, .

119) Roohparvar Basmenj, E., Izadkhah, H., Hosseinpour, M., Saburi, E., Abhaji Ezabadi, M., Al

**A novel approach to design a multiepitope peptide as a vaccine candidate for Bordetella pertussis**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

120) Wu, A., Wang, Y., Ali, A., Xu, Z., Zhang, D., Zhumanov, K., Sheng, J., Yi, J.

**Design of a multi-epitope vaccine against brucellosis fused to IgG-fc by an immunoinformatics approach**

(2023) *Frontiers in Veterinary Science*, 10, art. no. 1238634, .

121) Kumar, K.M., Karthik, Y., Ramakrishna, D., Balaji, S., Skariyachan, S., Murthy, T.P.K., Sakthi M., Sayed, S.M., Mushtaq, M.

**Immunoinformatic exploration of a multi-epitope-based peptide vaccine candidate against SARS-CoV-2**

(2023) *Frontiers in Microbiology*, 14, art. no. 1251716, .

122) Alsubaiyel, A.M., Bukhari, S.I.

**Computational exploration and design of a multi-epitopes vaccine construct against**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

123)

**Immunoinformatics Approach for the Design of Chimeric Vaccine Against Whitmore Disease**  
(2023) *Open Bioinformatics Journal*, 16, art. no. e187503622309080, .

124) Nabizadeh, S., Rahbarnia, L., Nowrozi, J., Farajnia, S., Hosseini, F.

**Rational design of hybrid peptide with high antimicrobial property derived from Melioidosis**  
(2023) *Journal of Biomolecular Structure and Dynamics*, .

125) Samimi Hashjin, A., Sardari, S., Rostamian, M., Ahmadi, K., Madanchi, H., Khalaj, V.

**A new multi-epitope vaccine candidate based on S and M proteins is effective in inducing immune responses against SARS-CoV-2 variants: an in silico design approach**  
(2023) *Journal of Biomolecular Structure and Dynamics*, .

126) Moqbel Hassan Alzubaydi, N., Oun Ali, Z., Al-Asadi, S., Al-kahachi, R.

**Design and characterization of a multi-epitope vaccine targeting Chlamydia abortus**  
**approach**  
(2023) *Journal of Biomolecular Structure and Dynamics*, .

127) Ishaq, Z., Zaheer, T., Waseem, M., Shahwar Awan, H., Ullah, N., AlAsmari, A.F., AlAsmari, A.

**Immunoinformatics aided designing of a next generation poly-epitope vaccine against E. coli to combat urinary tract infections**  
(2023) *Journal of Biomolecular Structure and Dynamics*, .

128) Shah, M., Anwar, A., Qasim, A., Jaan, S., Sarfraz, A., Ullah, R., Ali, E.A., Nishan, U., Shehr, B.

**Proteome level analysis of drug-resistant Prevotella melaninogenica for the identification of vaccine candidates**  
(2023) *Frontiers in Microbiology*, 14, art. no. 1271798, .

129) Aiman, S., Ahmad, A., Khan, A.A., Alanazi, A.M., Samad, A., Ali, S.L., Li, C., Ren, Z., Khan, M.

**Vaccinomics-based next-generation multi-epitope chimeric vaccine models predicted by machine learning - a hierarchical subtractive proteomics and immunoinformatics approach**  
(2023) *Frontiers in Immunology*, 14, art. no. 1259612, .

130)

Li, X., Wen, H., Xiao, X., Ren, Z., Tan, C., Fu, C.

**Design of a novel multi-epitope vaccine candidate against endometrial cancer using imm bioinformatics approaches**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

131) Feng, H.-S., Jin, H., Gao, Y.-Y., Xian, Y.-H., Li, H.-Y., Yang, S.-Y., Jia, A.-M., Gao, F.-S.

**Application of Immunoinformatics in Epitope Vaccine Development**

(2023) *China Biotechnology*, 43 (7), pp. 88-100.

132) Hosseiniinejad, Z., Daryani, A., Fasihi-Ramandi, M., Asgarian-Omran, H., Valadan, R., Nay

**In Silico Vaccine Design and Expression of the Multi-Component Protein Candidate i Parasite from MIC13, GRA1, and SAG1 Antigens**

(2023) *Iranian Journal of Parasitology*, 18 (3), pp. 301-312.

133) Verma, J., Kaushal, N., Manish, M., Subbarao, N., Shakirova, V., Martynova, E., Liu, R., H Khaiboullina, S.F., Baranwal, M.

**Identification of conserved immunogenic peptides of SARS-CoV-2 nucleocapsid pro**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

134) Kordi, B., Fotovati, A., Majidiani, H., Fazel, H., Azizi, E., Shams, M., Abaszadeh, A.

**Sporozoite glycoprotein antigen (SGA) of Cryptosporidium parvum is a promising va cryptosporidiosis In silico analysis of C. parvum SGA protein**

(2023) *Informatics in Medicine Unlocked*, 42, art. no. 101333, .

135) Khan, M.A.S., Miah, M.I., Rahman, S.R.

**A comprehensive immunoinformatic analysis of chitin deacetylase's and MP88 for d vaccines against Cryptococcus neoformans**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

136) Fathollahi, M., Motamedi, H., Hossainpour, H., Abiri, R., Shahlaei, M., Moradi, S., Dashtbin

**Designing a novel multi-epitopes pan-vaccine against SARS-CoV-2 and seasonal inf immunoinformatics approach**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

137) Ahmadi, N., Aghasadeghi, M., Hamidi-fard, M., Motevalli, F., Bahramali, G.

**Reverse Vaccinology and Immunoinformatic Approach for Designing a Bivalent Vaccine against Hepatitis A and Hepatitis B Viruses**  
(2023) *Molecular Biotechnology*, .

138) Ahmad, S., Nazarian, S., Alizadeh, A., Pashapour Hajjalilou, M., Tahmasebian, S., Alharbi, Ghatrehsamani, M., Irfan, M., Pazoki-Toroudi, H., Sanami, S.

**Computational design of a multi-epitope vaccine candidate against Langya henipavi**  
(2023) *Journal of Biomolecular Structure and Dynamics*, .

139) Salod, Z., Mahomed, O.

**Global research trends in reverse vaccinology from 2000 to 2021: A bibliometric analysis**  
(2023) *Informatics in Medicine Unlocked*, 41, art. no. 101313, .

140) Bhowmik, D., Bhuyan, A., Gunalan, S., Kothandan, G., Kumar, D.

**In silico and immunoinformatics based multiepitope subunit vaccine design for protozoan leishmaniasis**  
(2023) *Journal of Biomolecular Structure and Dynamics*, .

141) Parvez, M., Khan, T.

**Applications in the Field of Bioinformatics**  
(2023) *A Guide to Applied Machine Learning for Biologists*, pp. 175-188.

142) Mukhtar, M., Qadir, M.I.

**QadirVax-19: A multi epitope-based vaccine against COVID-19**  
(2023) *Kuwait Journal of Science*, 50 (1), .

143) Shuaib, M., Singh, A.K., Gupta, S., Alasmari, A.F., Alqahtani, F., Kumar, S.

**Designing of neoepitopes based vaccine against breast cancer using integrated immunoinformatics approach**  
(2023) *Journal of Biomolecular Structure and Dynamics*, .

144) Khan, K., Burki, S., Alsaiari, A.A., Alhuthali, H.M., Alharthi, N.S., Jalal, K.

**A therapeutic epitopes-based vaccine engineering against Salmonella enterica XDR strain: A Pan-vaccinomics approach**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

- 145) Rcheulishvili, N., Mao, J., Papukashvili, D., Feng, S., Liu, C., Wang, X., He, Y., Wang, P.G.

**Design, evaluation, and immune simulation of potentially universal multi-epitope mp DNA vaccine**

(2023) *Frontiers in Microbiology*, 14, art. no. 1203355, .

- 146) Roohparvar Basmenj, E., Omidvar, B., Kiumarsy, A., Izadkhah, H., Ghiabi, S.

**Design of a multi-epitope-based peptide vaccine against the SARS-CoV-2 Omicron variant: A new approach**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

- 147) Ma, S., Zhu, F., Wen, H., Rao, M., Zhang, P., Peng, W., Cui, Y., Yang, H., Tan, C., Chen, J.

**Development of a novel multi-epitope vaccine based on capsid and envelope proteins of SARS-CoV-2**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

- 148) Ahmed, M.H., Samia, N.S.N., Singh, G., Gupta, V., Mishal, M.F.M., Hossain, A., Suman, K. M.A., Sultana, J., Faysal, E.H., Alnasser, S.M., Alam, P., Azam, F.

**An immuno-informatics approach for annotation of hypothetical proteins and multi-epitope vaccine against the Mpox virus**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

- 149) Hussain, Z., Hayat, C., Shahab, M., Sikandar, R., Bibi, H., Kamil, A., Zheng, G., Liang, C.

**Immunoinformatics and Reverse Vaccinology Driven Prediction of a Multi-epitope Vaccine against SARS-CoV-2 and Validation through in silico Cloning and Immune Simulation**

(2023) *Current Pharmaceutical Design*, 29 (19), pp. 1504-1515.

- 150) Abdelaziz, M.O., Raftery, M.J., Weihs, J., Bielawski, O., Edel, R., Köppke, J., Vladimirova, A., Gruber, A.D., Hummel, L.V., Fernandez Munoz, I., Müller-Marquardt, F., Willimsky, G., E Schönrich, G.

**Early protective effect of a (“pan”) coronavirus vaccine (PanCoVax) in Roborovski dwarf hamsters after intranasal administration**

(2023) *Frontiers in Immunology*, 14, art. no. 1166765, .

151) Kalantari, H., Habibi, M., Ferdousi, A., Asadi Karam, M.R., Mohammadian, T.

**Development of a multi-epitope vaccine candidate against *Pseudomonas aeruginosa* and evaluation of its immunoreactivity in a rabbit model**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

152) Al-Kubati, A.A.G., Kandeel, M., Hussien, J., Hemida, M.G., Al-Mubarak, A.I.A.

**Immunoinformatic prediction of the pathogenicity of bovine viral diarrhea virus gene virulence determinants, designing novel diagnostic assays and vaccines development**

(2023) *Frontiers in Veterinary Science*, 10, art. no. 1130147, .

153) Aiman, S., Ali, Y., Malik, A., Alkholief, M., Ahmad, A., Akhtar, S., Ali, S., Khan, A., Li, C., Shaz

**Immunoinformatic-guided novel mRNA vaccine designing to elicit immunogenic response against Monkeypox virus**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

154) Imon, R.R., Samad, A., Alam, R., Alsaiani, A.A., Talukder, M.E.K., Almeahmadi, M., Ahamma

**Computational formulation of a multiepitope vaccine unveils an exceptional prophylactic effect against cell polyomavirus**

(2023) *Frontiers in Immunology*, 14, art. no. 1160260, .

155) Zhu, Y., Yu, M., Aisikaer, M., Zhang, C., He, Y., Chen, Z., Yang, Y., Han, R., Li, Z., Zhang, F

**Contriving a novel of CHB therapeutic vaccine based on IgV\_CTLA-4 and L protein via a novel approach**

(2023) *Journal of Biomolecular Structure and Dynamics*, .

156) Saikat, A.S.M.

**Computational approaches for molecular characterization and structure-based functional analysis of a hypothetical protein from *Mycobacterium tuberculosis***

(2023) *Genomics and Informatics*, 21 (2), art. no. e25, .

157) Albaqami, F.F., Altharawi, A., Althurwi, H.N., Alharthy, K.M., Tahir Ul Qamar, M., Muhseen, I

**Development of a Novel Vaccine Candidates against *Cardiobacterium valvarum* through Computational Approaches**

(2023) *BioMed Research International*, 2023, art. no. 6325568, .

- 158) Sharma, A.D., Grewal, R.K., Gorle, S., Cuspoca, A.F., Kaushik, V., Rajjak Shaikh, A., Cava  
**T cell epitope based vaccine design while targeting outer capsid proteins of rotaviru  
an immunoinformatics approach**  
(2023) *Journal of Biomolecular Structure and Dynamics*, .
- 159) Muhammad Rehman, H., Rehman, H.M., Naveed, M., Khan, M.T., Shabbir, M.A., Aslam, S  
**In Silico Investigation of a Chimeric IL24-LK6 Fusion Protein as a Potent Candidate /**  
(2023) *Bioinformatics and Biology Insights*, 17, .
- 160) Kordi, B., Basmenj, E.R., Majidiani, H., Basati, G., Sargazi, D., Nazari, N., Shams, M.  
**In Silico Characterization of an Important Metacyclogenesis Marker in Leishmania d  
Potential Vaccine Candidate**  
(2023) *BioMed Research International*, 2023, art. no. 3763634, .
- 161) Widjaja, T., Ansori, A.N.M., Kharisma, V.D., Faizal, I., Antonius, Y., Trinugroho, J.P., Proboj  
Burkov, P., Scherbakov, P., Gribkova, V., Nikolaeva, N., Vasilievich, N., Jakhmola, V., Ullah  
**B-Cell Conserved Epitope Screening and In Silico Cloning of Envelope Glycoprotein  
Vaccine Candidate Construction**  
(2023) *Indonesian Journal of Pharmacy*, 34 (2), pp. 193-204.
- 162) Ahmad, S., Dahiya, V., Vibhuti, A., Pandey, R.P., Tripathi, M.K., Yadav, M.K.  
**Therapeutic Protein-Based Vaccines**  
(2023) *Protein-based Therapeutics*, pp. 355-384.
- 163) Park, J.-Y., Cho, S.-H.  
**Production of monoclonal antibody of heat-labile toxin A subunit to identify enteroto  
epitope mapping using synthetic peptides**  
(2023) *Frontiers in Immunology*, 14, art. no. 1152910, .
- 164) Cireli, E., Çavaş, L.  
**A Sample Guideline for Reverse Vaccinology Approach for the Development of Subu  
Zoster as a Model Disease**  
(2023) *Methods in Molecular Biology*, 2673, pp. 453-474.



165) Di Salvatore, V., Russo, G., Pappalardo, F.

**Reverse Vaccinology for Influenza A Virus: From Genome Sequencing to Vaccine Design**  
(2023) *Methods in Molecular Biology*, 2673, pp. 401-410.

166) Kalita, P., Padhi, A.K., Tripathi, T.

**Immunoinformatics Protocol to Design Multi-Epitope Subunit Vaccines**  
(2023) *Methods in Molecular Biology*, 2673, pp. 357-369.

167) Ayyagari, V.S.

**Design of Linear B Cell Epitopes and Evaluation of Their Antigenicity, Allergenicity, and Immunoinformatics Approach**  
(2023) *Methods in Molecular Biology*, 2673, pp. 197-209.

168) Bemani, P., Mohammadi, M.

**In silico Prediction and Evaluation of Human Parainfluenza Virus-3 CD4+ T Cell Epitopes**  
(2023) *Current Computer-Aided Drug Design*, 19 (3), pp. 163-175.

169) Kumari, S., Kessel, A., Singhal, D., Kaur, G., Bern, D., Lemay-St-Denis, C., Singh, J., Jain, A.

**Computational identification of a multi-peptide vaccine candidate in E2 glycoprotein of influenza A virus genotypes**  
(2023) *Journal of Biomolecular Structure and Dynamics*, 41 (20), pp. 11044-11061.

170) Hameed, A.R., Mohammed, B.Q., Jassim, T.S., Alharbi, M., Ahmad, S.

**Design of a novel multi-epitopes based vaccine against brucellosis**  
(2023) *Informatics in Medicine Unlocked*, 39, art. no. 101276, .

171) Sarmadi, A., Hassanzadeganroudsari, M., Soltani, M.

**Artificial Intelligence and Machine Learning Applications in Vaccine Development**  
(2023) *Bioinformatics Tools for Pharmaceutical Drug Product Development*, pp. 233-253.

172) Jahantigh, H.R., Shahbazi, B., Gouklai, H., Van der Weken, H., Gharibi, Z., Rezaei, Z., Hatami, A.

**Design peptide and multi-epitope protein vaccine candidates against monkeypox virus using a novel approach: an in-silico study**

(2023) *Journal of Biomolecular Structure and Dynamics*, 41 (23), pp. 14398-14418.

173) Bi, B., Yuan, Y., Jia, D., Jiang, W., Yan, H., Yuan, G., Gao, Y.

**Identification and Pathogenicity of Emerging Fish Pathogen *Acinetobacter johnsonii* in Rainbow Trout (*Oncorhynchus mykiss*)**

(2023) *Aquaculture Research*, 2023, art. no. 1995494, .

174) Albaqami, F.F., Altharawi, A., Althurwi, H.N., Alharthy, K.M., Qasim, M., Muhseen, Z.T., Taher

**Computational Modeling and Evaluation of Potential mRNA and Peptide-Based Vaccine (MARV) to Provide Immune Protection against Hemorrhagic Fever**

(2023) *BioMed Research International*, 2023, art. no. 5560605, .

175) Dorosti, H., Zarei, M., Nezafat, N.

**Proteome Exploration of Human Coronaviruses for Identifying Novel Vaccine Candidates Using Genomics and Reverse Vaccinology Approach**

(2023) *Recent Patents on Biotechnology*, 17 (2), pp. 163-175.

176) Moodley-Reddy, A., Chiliza, T.E., Poole, O.J.

**Computational Analysis, In silico Functional Annotation, and Expression of Recombinant Biomarkers Found in *Mycobacterium tuberculosis***

(2023) *Open Bioinformatics Journal*, 16, art. no. e187503622301050, .

177) Qasim, A., Jaan, S., Wara, T.U., Shehroz, M., Nishan, U., Shams, S., Shah, M., Ojha, S.C.

**Computer-aided genomic data analysis of drug-resistant *Neisseria gonorrhoeae* for identifying therapeutic targets**

(2023) *Frontiers in Cellular and Infection Microbiology*, 13, art. no. 1017315, .

178) Larijani, A., Kia-Karimi, A., Roostaei, D.

**Design of a multi-epitopic vaccine against Epstein-Barr virus via computer-based modeling**

(2023) *Frontiers in Immunology*, 14, art. no. 1115345, .

179) Tan, C., Zhu, F., Pan, P., Wu, A., Li, C.

**Development of multi-epitope vaccines against the monkeypox virus based on envelope immunoinformatics approaches**

(2023) *Frontiers in Immunology*, 14, art. no. 1112816, .

180) Anandhan, G., Narkhede, Y.B., Mohan, M., Paramasivam, P.

**Immunoinformatics aided approach for predicting potent cytotoxic T cell epitopes of**

(2023) *Journal of Biomolecular Structure and Dynamics*, 41 (21), pp. 12093-12105.

181) Joshi, A., Akhtar, N., Sharma, N.R., Kaushik, V., Borkotoky, S.

**MERS virus spike protein HTL-epitopes selection and multi-epitope vaccine design i**

(2023) *Journal of Biomolecular Structure and Dynamics*, 41 (22), pp. 12464-12479.

182) Gouda, A.M., Soltan, M.A., Abd-Elghany, K., Sileem, A.E., Elnahas, H.M., Ateya, M.A.-M., I Bogari, H.A., Lashkar, M.O., Aldurdunji, M.M., Elhady, S.S., Ahmad, T.A., Said, A.M.

**Integration of immunoinformatics and cheminformatics to design and evaluate a mu**  
**Klebsiella pneumoniae and Pseudomonas aeruginosa coinfection**

(2023) *Frontiers in Molecular Biosciences*, 10, art. no. 1123411, .

183) Gaiya, D.D., Muhammad, A., Aimola, I.A., Udu, S.K., Balarabe, S.A., Auta, R., Ekpa, E., St

**Potential of Onchocerca ochengi inosine-5'-monophosphate dehydrogenase (IMPDH**  
**monophosphate oxidoreductase (GMPR) as druggable and vaccine candidates: imm**

(2023) *Journal of Biomolecular Structure and Dynamics*, 41 (24), pp. 14832-14848.

184) Mazumder, L., Hasan, M.R., Fatema, K., Begum, S., Azad, A.K., Islam, M.A.

**Identification of B and T Cell Epitopes to Design an Epitope-Based Peptide Vaccine i**  
**Binding Protein of Monkeypox Virus: An Immunoinformatics Study**

(2023) *Journal of Immunology Research*, 2023, art. no. 2274415, .

185) Zhu, F., Tan, C., Li, C., Ma, S., Wen, H., Yang, H., Rao, M., Zhang, P., Peng, W., Cui, Y., Cl

**Design of a multi-epitope vaccine against six Nocardia species based on reverse va**  
**immunoinformatics**

(2023) *Frontiers in Immunology*, 14, art. no. 1100188, .

186) Nayak, S.S., Sethi, G., Ramadas, K.

**Design of multi-epitope based vaccine against Mycobacterium tuberculosis: a subtractive vaccinology based immunoinformatics approach**

(2023) *Journal of Biomolecular Structure and Dynamics*, 41 (23), pp. 14116-14134.

187) Rangacharya, O., Parab, A., Adkine, S., Nagargoje, R.

**A study on the design of an in silico self-amplifying mRNA vaccine against Nipah vir**

(2023) *Journal of Biomolecular Structure and Dynamics*, 41 (22), pp. 12777-12788.

188) Ali, Z., Cardoza, J.V., Basak, S., Narsaria, U., Singh, V.P., Isaac, S.P., França, T.C.C., LaPl

**Computational design of candidate multi-epitope vaccine against SARS-CoV-2 target non-structural (NSP3 and NSP12) proteins**

(2023) *Journal of Biomolecular Structure and Dynamics*, 41 (22), pp. 13348-13367.

189) Bayani, F., Safaei Hashkavaei, N., Karamian, M.R., Uskoković, V., Sefidbakht, Y.

**In silico design of a multi-epitope vaccine against the spike and the nucleocapsid protein of SARS-CoV-2**

(2023) *Journal of Biomolecular Structure and Dynamics*, 41 (21), pp. 11748-11762.

190) Pal, A., Pyne, N., Paul, S.

**In-Silico Designing of a Multi-Epitope Vaccine against SARS-CoV2 and Studying the Alpha, Beta, Delta and Omicron Variants of Concern**

(2023) *Current Drug Discovery Technologies*, 20 (1), art. no. e090922208713, .

191) Rahman, S., Sarkar, K., Das, A.K.

**Exploring staphylococcal superantigens to design a potential multi-epitope vaccine aureus: an in-silico reverse vaccinology approach**

(2023) *Journal of Biomolecular Structure and Dynamics*, 41 (22), pp. 13098-13112.

192) Wang, Z., Xu, S., Zheng, X., Zheng, X., Liu, M., Guo, G., Yu, Y., Han, X., Liu, Y., Wang, K.,

**Identification of Subunits for Novel Universal Vaccines against Three Predominant S O145 among Avian Pathogenic Escherichia coli by Pan-RV Pipeline**

(2023) *Applied and Environmental Microbiology*, 89 (1), .

193) Anand, P.P., Shibu Vardhanan, Y.

**Molecular cloning, expression, mRNA secondary structure and immunological characteri proteins (Mfps) (Mollusca: Bivalvia)**

(2023) *Journal of Biomolecular Structure and Dynamics*, 41 (21), pp. 12242-12266.

194) Akash, S.R., Hossain, M.I., Ali, M.S.

**Developing a multiepitope vaccine against dengue virus in Bangladesh using immu**

(2023) *Journal of Advanced Biotechnology and Experimental Therapeutics*, 6 (1), pp. 44-5

195) Romano, M., Squeglia, F., Kramarska, E., Barra, G., Choi, H.-G., Kim, H.-J., Ruggiero, A.,

**A Structural View at Vaccine Development against M. tuberculosis**

(2023) *Cells*, 12 (2), art. no. 317, .

196) Pchelin, I.M., Tkachev, P.V., Azarov, D.V., Gorshkov, A.N., Drachko, D.O., Zlatogursky, V.V.

**A Genome of Temperate Enterococcus Bacteriophage Placed in a Space of Pooled V**

(2023) *Viruses*, 15 (1), art. no. 216, .

197) Peng, C., Tang, F., Wang, J., Cheng, P., Wang, L., Gong, W.

**Immunoinformatic-Based Multi-Epitope Vaccine Design for Co-Infection of Mycobacti CoV-2**

(2023) *Journal of Personalized Medicine*, 13 (1), art. no. 116, .

198) Malaina, I., Martínez, L., Montoya, J.M., Alonso, S., Boyano, M.D., Asumendi, A., Izu, R., S G., M. de la Fuente, I.

**A Universal Antigen-Ranking Method to Design Personalized Vaccines Targeting Ne**

(2023) *Life*, 13 (1), art. no. 155, .

199) Jamil, F., Aslam, L., Laraib, Ali, H., Shoukat, K., Rasheed, M.A., Raza, S., Ibrahim, M.

**An in silico study of derivative of Newcastle disease virus epitopes based vaccine a neuraminidase protein**

(2023) *Journal of Animal Science*, 101, art. no. skac375, .

200) Andongma, B.T., Huang, Y., Chen, F., Tang, Q., Yang, M., Chou, S.-H., Li, X., He, J.

**In silico design of a promiscuous chimeric multi-epitope vaccine against Mycobacte**

(2023) *Computational and Structural Biotechnology Journal*, 21, pp. 991-1004.

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