Contents

REVIEW ARTICLES

2972-2988  Old Enemy with a New Face: Re-emerging Monkeypox Disease – An Update
Md. Aminul Islam, Mizbahul Karim Hemo, Hitesh Chopra, Mohammad Ruhul Amin, Prosun Bhattacharya and Kuldeep Dhama

2989-2999  Monkeypox Viruses: Resurgence of Global Threat to Mankind

3000-3012  An overview on Monkeypox, Current Paradigms and Advances in its Vaccination, Treatment and Clinical Management: Trends, Scope, Promise and Challenges
Varruchi Sharma, Diwakar Aggarwal, Anil Kumar Sharma, Deepak Chandran, Ajay Sharma, Hitesh Chopra, Talha Bin Emran, Abhijit Dey and Kuldeep Dhama

3013-3024  An International Outburst of New Form of Monkeypox Virus
Kiran Dobhal, Pallavi Ghildiyal, A.N.M. Ansori and Vikash Jakhmola

3025-3035  Monkeypox: A Review in Indian Context
Uzma Tayyaba, Asfia Sultan, Fatima Khan, Shariq Ahmed and Iqbal Ahmad

3036-3047  An Estimation of Five-decade Long Monkeypox Case Fatality Rate: Systematic Review and Meta-analysis

3048-3061  Human-to-Human Transmission of Monkeypox Virus Old Virus with a New Face
Poonam Joshi, Aanchal Loshali, Yogita Ale, Gulafshan Parveen, Purabi Saha and Vikas Jakhmola

3062-3071  Monkeypox Disease: History, Epidemiology, Threat Assessment, and Management Strategies
Nikhil Nath, Kuldeep Dhama and Talha Bin Emran

3072-3082  Monkeypox Virus: Lessons Learnt
Sunanda Kulshrestha, Amisha Rastogi and Anjana Goel

MINI REVIEWS

3083-3095  Major Advances in Monkeypox Vaccine Research and Development – An Update

3096-3105  Candidate Vaccines and Therapeutics against Monkeypox Infection
Nidhi Nainwal and Vikash Jakhmola

3106-3118  Changing Patterns in the Spread of Human Monkeypox: A Dangerous New Development in Disease Epidemiology
## Contents

**3119-3129** Systematic Review On New Face of Monkeypox Virus  
Shilpa Rana, Pooja Negi, Meena Devi, Mansi Butola, Arif Nur Muhammad Ansori and Vikash Jakhmola

**3130-3137** A Review Article on Monkeypox, Infection Transmission, Prevention, Vaccination and Role of Health Care  
Mayur Wanjari, Sampada Late, Amruta Kothe, Pragati Alnewar, Pratiksha Munjewar, Vaishnavi Kantode, Ranjana Sharma, Seema Singh, Jaya Gawai, Vaishali Taksande, Deeplata Medhe and Abhyuday Meghe

**3138-3143** Monkeypox and Hand-Foot-Mouth Disease Outbreak in India: A Double Trouble?  
Subhashree Mohapatra and Rahul Mohandas

## RESEARCH ARTICLES

**3144-3154** Computational Purposing Phytochemicals against Cysteine Protease of Monkeypox Virus: An In-silico Approach  
Poonam Bansal, Mahiti Gupta, Sonali Sangwan, Gurpreet Kaur Bhati, Seema Ramniwas, Deepak Chandran, Abhijit Dey, Kuldeep Dhama and Hardeep Singh Tuli

**3155-3167** The Mpox Disease: Awareness and Apprehensions among the Medical Undergraduates and Nursing Staff  
Shariq Ahmed, Md. Mobasshir Hassan, Fatima Khan, Asfia Sultan and Mohammad Salman Shah

**3168-3178** Tecovirimat as a Potential Bioavailable inhibitor against MPXVgp158 Established through Molecular Dynamic Simulations and Docking Studies  
Varruchi Sharma, Anil Panwar, Vivek Kumar Garg, Hardeep Singh Tuli, Sonal Datta, Anil K Sharma, Abhijit Dey, Deepak Chandran and Kuldeep Dhama

## SHORT COMMUNICATIONS

**3179-3184** Marburg Virus and Monkeypox Virus: The Concurrent Outbreaks in Ghana and the lesson learned from the Marburg Virus Containment  
Ranjit Sah, Abdullah Reda, Basant Ismail Lashin, Abdelaziz Abdelaal, Aroop Mohanty, Abdelmonem Siddiq and Bijaya Kumar Padhi

**3185-3188** Impact of Three Outbreaks on Mpox Prevention Program in Iraq: Lessons and Recommendations  
Ahmed A. Mosa and Nawfal R. Hussein

**3189-3191** Prevention, Vaccination, Management and Infection Control of Monkeypox Outbreak: an Update Global Recommendation for the Next Year 2023  
Sirwan Khalid Ahmed

**3192-3197** Genesis of Monkeypox  
Abdul Basit, Jasni Mohamad Zain, Hafiza Zoya Mojahid and Mushtaq Ali