**XF-73 Nasal Literature Review**

**Period: 24/02/2025 – 24/03/2025**

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Scientific Highlights

1. Methicillin-resistant Staphylococcus aureus (MRSA) carriage among the critical care personnel in a tertiary care hospital in Sikkim: An observational study.
2. Knowledge, attitude, and practices regarding methicillin-resistant Staphylococcus aureus (MRSA) infection control and nasal MRSA carriage rate among dental students of Al-Quds university, Palestine.

SA Decolonisation

1. 3D-printed surface coated with natural photosensitizer for photodynamic inactivation of methicillin-resistant Staphylococcus aureus using visible light.
2. Active surveillance in an equine intensive care unit identifies clusters of ESKAPEE pathogens in the veterinary hospital environment.
3. RETRACTION: Prevalence of Surgical Site Wound Infection After Spine Surgery in Nasal Colonization of Methicillin-Resistant Staphylococcus aureus: A Meta-Analysis.
4. Evaluating long-term MRSA colonization and household spread: Insights from a community-based study.
5. Isolation and antimicrobial resistance patterns of Staphylococcus aureus and Escherichia coli from caprine respiratory tract infections: A hospital-based clinical study.
6. Diagnostic Accuracy of a Nasal Rapid Staphylococcus aureus PCR Test in Intubated Children With Severe Community-Acquired Pneumonia.
7. Elexacaftor-Tezacaftor-Ivacaftor Improves Sinonasal Outcomes in Young Children With Cystic Fibrosis.
8. Evaluating infection risk associated with Staphylococcus aureus nasal carriage in blood donors: a prospective multicentre study in Denmark.
9. PREVALENCE AND RISK FACTORS FOR STAPHYLOCOCCUS AUREUS COLONISATION AMONG HEALTHY INDIVIDUALS IN LOW- AND MIDDLE-INCOME COUNTRIES: A SYSTEMATIC REVIEW AND META-ANALYSIS.
10. Universal vs Targeted Chlorhexidine Bathing and Nasal Decolonization in Hospitalized Patients.
11. Nasal methicillin-resistant Staphylococcus aureus carriage among hospitalized patients before and after COVID-19 pandemic in a regional hospital in taiwan.
12. Efficient Extraction, Chemical Characterization, and Bioactivity of Essential Oil From Pine Needles.
13. [Analysis of colonization rate and molecular characteristics of Staphylococcus aureus on tracheotomy wounds at early postoperational stage in neonates].
14. Analysis of Staphylococcus aureus infections among pediatric Indian patients.
15. The human microbiome-derived antimicrobial lugdunin self-regulates its biosynthesis by a feed-forward mechanism.
16. Multiple antimicrobial resistance indices of Staphylococcus aureus from the nares of goats and slaughterhouse attendants in Kampala city, Uganda- a cross sectional study.

SA / MRSA Colonisation / Infection

1. Neurosurgical site infections: a retrospective monocentric study of pediatric brain tumor patients.
2. Surgical and microbiological characteristics that influence the probability of reoperation to promote bone healing after fracture-related infection diagnosis.
3. Usefulness of a hub and spoke TDM-guided expert clinical pharmacological advice program of dalbavancin for optimizing very long-term curative or suppressive treatment of chronic staphylococcal infections.
4. Pathogen Distribution, Drug Resistance, and Postoperative High-Quality Nursing Intervention Effectiveness in Knee Osteoarthritis Patients After Knee Arthroplasty With Postoperative Infection.
5. Enhancing Implantable Medical Devices: Surface Functionalization of Titanium with Quaternary Ammonium Salts for Antibacterial Adhesion Properties.
6. CD4+ T cell-innate immune crosstalk is critical during Staphylococcus aureus craniotomy infection.
7. A silent opponent: Staphylococcus aureus and its impact on wrestlers.
8. Endogenous nitric oxide promotes Staphylococcus aureus virulence by activating autophagy.
9. Electrospun Collagen-Coated Nanofiber Membranes Functionalized with Silver Nanoparticles for Advanced Wound Healing Applications.
10. Detection of Virulence Genes and Antimicrobial Susceptibility Profiles of Staphylococcus aureus Isolates From Bovine Mastitis in Chagni, Northwestern Ethiopia.
11. A survey on the prevalence of health care-associated infections at the Fann University Hospital in Dakar, Senegal.
12. Living with dogs and cats: Is it a risk factor for community acquired methicillin-resistant Staphylococcus aureus skin and soft tissue infections in humans?
13. Prevalence study of antimicrobial resistant organisms in very preterm neonates.
14. CLEC3A-Derived Antimicrobial Peptides Reduce Staphylococcus aureus Bacterial Counts in an In Vivo Biomaterial-Associated Infection Mouse Model.
15. Antimicrobial Resistance Patterns and Biofilm Analysis via Sonication in Intensive Care Unit Patients at a County Emergency Hospital in Romania.
16. QuantiFERON(®) Monitor Test as a Potential Tool for Stratifying Patients by Infection Risk and Tailoring Follow-Up Care in Lung Transplant Recipients: A Single-Center Retrospective Experience.
17. Analysis of Midgut Bacterial Communities in Larvae and Adult Mosquitoes of Aedes aegypti Invaded by Three Different Microorganisms.
18. Molecular Epidemiology Clinical Manifestations, Decolonization Strategies, and Treatment Options of Methicillin-Resistant Staphylococcus aureus Infection in Neonates.
19. An Observational, Cross-Sectional Study to Investigate Whether Room Air Ventilators, Used in the Community Setting, Are Colonised by Potential Airborne Pathogens (IPAP Study).
20. Could a Reduced Dose of 8 g of Continuous Infusion Fosfomycin Be Considered as Effective as and Safer than a Standard 16 g Dose When Combined with High-Dose Daptomycin in the Treatment of Staphylococcal osteoarticular Infections?
21. Preoperative conjunctival flora and antibiotic susceptibility in cataract surgery patients at Ibn Al-Haitham teaching eye hospital in Baghdad, Iraq.
22. Improving Infection Prevention in Cardiac Surgery: A Quality Improvement Project on Antibiotic Prophylaxis.
23. An mRNA Display Approach for Covalent Targeting of a Staphylococcus aureus Virulence Factor.
24. Factors Associated With Observation Unit Admission in Emergency Department Patients With Skin and Soft Tissue Infections.
25. Clonal Candida auris and ESKAPE pathogens on the skin of residents of nursing homes.
26. Clinical and demographic characteristics of spondylodiscitis in a Mexican population: A retrospective study.
27. [Distribution of pathogens in patients with ventilator-associated pneumonia and their association with Dectin-1/Syk signaling pathway].
28. Methicillin-resistant Staphylococcus aureus (MRSA) in men having sex with men (MSM): a systematic review.
29. Molecular Epidemiological Features of Methicillin-Resistant Staphylococcus aureus in Japan.
30. Fitness cost and compensatory evolution of penicillin-induced resistant Staphylococcus aureus.
31. Posterior fixation without debridement for pyogenic spondylodiscitis can promote infection control: initial evaluation of a pyogenic spondylodiscitis posterior fixation rat model.
32. Bacteria profiles and antimicrobial susceptibility pattern of isolates from beds and door handles of hospital wards in Tiko Health District, Cameroon.
33. Tricuspid Endocarditis Leading to a Stroke: A Case Report of Paradoxical Embolism in a Young Intravenous Drug User.
34. A Semi-Interpenetrating Network Hydrogel with Excellent Photothermal Antibacterial and ROS Scavenging Activities for MRSA-Infected Wounds.
35. Oropharyngeal Staphylococcus aureus is linked to higher mortality in long-term aged care residents.
36. Contact Precautions for Preventing Methicillin-resistant Staphylococcus aureus in Pediatric Healthcare Settings: Pros, Cons, and Future Actions.
37. Potential Impact of Doxycycline Post-Exposure Prophylaxis on Tetracycline Resistance in Neisseria gonorrhoeae and Colonization with Tetracycline-Resistant Staphylococcus aureus and Group A Streptococcus.
38. Full-root aortic valve replacement using medtronic freestyle bioroots for infective endocarditis.
39. Biomaterial-associated infections: Their development, characterization, prevention and treatment.
40. Community-onset bloodstream infection among people with opioid use disorders: a twenty-year population-based cohort study in Queensland, Australia.
41. Detection of hospital super bacteria MRSA from the hands of healthcare professionals using machine learning and hyperspectral imaging.
42. Incidence, bacteriological profile and predictors of surgical site infections following limb amputation at Bugando medical centre and Sekou toure referral regional hospital, Mwanza, Tanzania.
43. Interactions between bacteria in the human nasopharynx: a scoping review.
44. Rapid, reference-free identification of bacterial pathogen transmission using optimized split k-mer analysis.
45. Bacterial colonisation doubles the risk of exacerbation in alpha-1 antitrypsin deficiency.
46. Host-Derived Delta-Like Canonical Notch Ligand-1 in Sepsis and Septic shock: Infection site, pathogens and disease severity matter - Secondary Analysis of Data from a Randomized Controlled Trial.
47. Craniopharyngioma and Abscess: when Tumor and Infection Co-exist.
48. An Under-Recognised Rapidly Fatal Condition: Phlegmonous Gastritis.
49. Predictive model for surgical intervention in pediatric acute hematogenous osteomyelitis.
50. A Race Against Time: Rapidly Progressive Methicillin Resistant Staphylococcus aureus Pansinusitis with Vision Loss in an Immunocompetent Child.
51. Vancomycin Resistant Enterococcus (VRE) - emergence to endemicity in a tertiary hospital in Singapore.
52. Clinical presentation, treatment, and antimicrobial susceptibility of 155 sequential Staphylococcus lugdunensis infections.
53. Pyomyositis Caused by Streptococcus agalactiae: A Case Report and Review of the Literature.
54. Antimicrobial Resistance and Migration: Interrelation Between Two Hot Topics in Global Health.
55. Patients treated for infection following ACL reconstruction with graft removal have poorer outcomes than those treated with graft retention: A systematic review.
56. What factors are associated with surgical site infections after intracranial neurosurgical procedures? An exploratory register study.
57. Open and endovascular repair of infected femoral artery pseudoaneurysms in intravenous drug abusers: results from the Italian "IN-FEMS" (INfected Femoral artery psEudoaneurysMs in drug addictS) multicentric Registry.
58. Injectable alginate/collagen clindamycin hydrogel for treatment of surgical site infections.
59. Preclinical Evaluation of the Safety, Toxicity and Efficacy of Genetically Modified Wharton's Jelly Mesenchymal Stem/Stromal Cells Expressing the Antimicrobial Peptide SE-33.
60. Virucidal and Bactericidal Properties of Biocompatible Copper Textiles.
61. Anti-inflammatory and antibacterial hydrogel based on a polymerizable ionic liquid.
62. Postoperative pneumonia in isolated coronary artery bypass grafting: A comprehensive study of epidemiology, etiology, and disease burden from China (2020-2023).
63. Could a handheld point-of-care ultrasound system alter the management of patients with pleural infection?
64. Genome-wide mutagenesis identifies factors involved in MRSA vaginal colonization.
65. Antimicrobial-Resistant Infections in Hospitalized Patients.
66. Failure to Close: An Unexpected Surgical Complication Reveals OTULIN Haploinsufficiency.
67. Bacteraemia in a Nigerian hospital: Implementing antimicrobial resistance surveillance.
68. High incidence of multidrug-resistant organisms and modifiable risk factors associated with surgical site infections: a cohort study in a tertiary medical center in Kuala Lumpur, Malaysia from 2020 to 2023.
69. Surveillance of surgical site infections among caesarean section in VINCat hospitals: Results from 2008 to 2022.
70. The epidemiology of antimicrobial resistant bacterial infection in Qatar: A systematic review and meta-analysis.
71. Frequency of haematogenous periprosthetic joint infection due to bacteraemia caused by gram-positive cocci.
72. Exercise-driven gut microbiota alterations enhance colonization resistance against methicillin-resistant Staphylococcus aureus.
73. Friedelin: A natural compound exhibited potent antibacterial, anti-inflammatory, and wound healing properties against MRSA-infected wounds.
74. Fractional inhibitory concentration of bio-actives from agricultural waste disassembles biofilms and quenches virulence of nosocomial pathogens.
75. H(2)O(2)-Driven Aggregation Induced Emission-Based Nanomotors for the Monitoring and Treatment of Infected Surgical Wound.
76. Ion-paired moxifloxacin nanocrystal formulation improves treatment and prevention of ocular infection.
77. Secondary Infection of Adverse Local Tissue Reaction Leading to Amputation in a Patient With a Modular Knee Endoprosthesis.
78. Dual Functionalized Absorbable Hairy Cellulose-Based Fabric for Efficient Hemostasis and Antibacterial Property.
79. Surgical Site Infections: Prospective Study in a Medical College Teaching Hospital at Port Blair, India.
80. Assessment of Methicillin-Resistant Staphylococcus aureus (MRSA) knowledge and awareness among healthcare workers in South-Lebanon.
81. Innovative Management of Brodie's Abscess: Continuous Local Antibiotic Perfusion in a 14-Year-Old Patient.
82. Global changes in Staphylococcus aureus virulence and metabolism during colonization of healthy skin.
83. D-alanylation of lipoteichoic acids inhibitor provides anti-virulence and anti-resistance effects against methicillin-resistant Staphylococcus epidermidis.
84. Epidemiology of Staphylococcus haemolyticus nosocomial bacteraemia in neonatal intensive care units, France, 2019 to 2023: predominance of the ST29 (CC3) multidrug-resistant lineage.
85. Exploring sex differences in infective endocarditis - a prospective, observational study from Western Norway.
86. Healthcare-associated infections and antimicrobial use: the third point prevalence survey on 42 acute care hospitals in Piedmont, Italy, 2022.
87. Biocompatibility and antibacterial activity of strontium and silver ion-releasing titanium with high silver treatment concentration.
88. Probing the Multitargeted Potency of FDA-approved Amifostine against MRSA and Control Comparison with Sulfamethoxazole to Establish Alternative Medications.
89. A rare case of prostatic abscess caused by MRSA in a healthy young male: A case report and literature review.
90. Aetiology, antimicrobial susceptibility patterns and factors associated with bacteriuria among HIV-infected women attending Prevention of Mother-to-Child Transmission (PMTCT) clinic at Bukoba Municipality, Tanzania.

Guidelines / Prevention Practice

1. Current Approaches on Nurse-Performed Interventions to Prevent Healthcare-Acquired Infections: An Umbrella Review.
2. Presentation and outcomes of surgery for choledochal cyst in children and adults: an experience of 329 cases.
3. Not All in Vein: Oral Antibiotics for Diabetic Foot Osteomyelitis: A Narrative Review.
4. Nurse Perceptions of Barriers to Infection Prevention and Control in Labor and Delivery.
5. From Cure to Prevention: Doxycycline's Potential in Prophylaxis for Sexually Transmitted Infections.

Breast Surgery

1. Short-Term Outcomes and Cosmetic Results of Pre-pectoral Implant-Based Breast Reconstruction Using Braxon® Mesh: A Systematic Review of Post-operative Complications.
2. Optimizing Outcomes in Breast Reconstruction: The Role of Hormonal Therapy Management.
3. Evolving strategies for the routine follow-up of patients with early breast cancer and the impact of COVID-19: a survey of healthcare providers.
4. Utility of contrast-enhanced magnetic resonance imaging for planning of surgical procedure in Paget's disease of the breast.
5. Polypropylene Mesh in Nipple-Sparing Mastectomy and Immediate Implant-based Breast Reconstruction in Vietnamese Early Breast Cancer Patients: Safe and Feasible.
6. RETRACTION: The Effect of Neoadjuvant Chemotherapy on Surgical Site Wound Infection after Immediate Breast Reconstruction in Patients With Breast Cancer: A Meta-Analysis.
7. Benefits and challenges of cervical cancer screening since the implementation of the 'two cancer' screening programme in China: findings from Shangyu, Zhejiang in 2019-23.
8. Implant infection after prepectoral breast reconstruction treated with negative pressure wound therapy and photobiomodulation: a case report.
9. Effective surgical outcomes of the pararectus approach for psoas abscess: a case series.
10. Complications associated with abdominal incisional wound vacuum assisted closure following deep inferior epigastric perforator flap harvest for breast reconstruction: A single institution retrospective study.
11. Implant Size Versus Mastectomy Weight in Breast Reconstruction: Does Matching Matter?
12. Complications and Patient-Reported Outcomes in Prepectoral vs Submuscular Breast Reconstruction Following Nipple Sparing Mastectomy.
13. Comparing Body Contouring Surgery Outcomes Inpatient Versus Outpatient in an Appalachian Tristate Population.
14. Tranexamic Acid for Postoperative Outcomes in Breast Plastic Surgery: A Systematic Review and Meta-analysis.
15. Wise Versus Vertical Mastopexy Pattern Skin-reducing Mastectomy With Immediate Breast Reconstruction: Systematic Review and Meta-analysis.
16. Use of TIGR Synthetic Reabsorable Mesh in Primary Breast Reconstruction.
17. Dermabond for reduction mammoplasty revisited: Its effects on postoperative wound healing.
18. Video-assisted submuscular breast reconstruction: evaluating a novel technique in high-risk patients.
19. Great Mimics in Oncology: A Retrospective Study from a Tertiary Care Centre of Eastern India.
20. Effect of Tranexamic Acid in Reducing Seroma Formation and Drain Output After Modified Radical Mastectomy: A Double Blind Randomized Control Trial.
21. The Laterality of Port Catheter Placement in Breast Cancer Patients: Investigating the Impact of Side Selection.
22. Predictors of 30-day Hospital Readmission after Autologous vs. Implant-based Breast Reconstruction: A 16-year Analysis of 175,474 Patients.
23. Vertical Breast Reduction Mammaplasty in the Adolescent Population.

Mupirocin resistance

1. Clinical Features and Antibiotic Susceptibility of Staphylococcus aureus-Infected Dermatoses.
2. Impact of methicillin-resistant Staphylococcus aureus surveillance and decolonization in the NICU: the Texas children's hospital experience.
3. A Novel Ammonium Carboxylate Salt of Undecylenic Acid for the Topical Treatment of Gram-Positive and Antibiotic-Resistant Skin Infections.
4. Unveiling the Genetic Landscape of Staphylococcus aureus Isolated From Hospital Wastewaters: Emergence of Hypervirulent CC8 Strains in Tehran, Iran.

Competitors

1. PAPreC: A Pipeline for Antigenicity Prediction Comparison Methods across Bacteria.
2. An unusual presentation of rhinosporidiosis in the lacrimal sac - A case report and a literature review.
3. Tackling Infectious Diseases in the Caribbean and South America: Epidemiological Insights, Antibiotic Resistance, Associated Infectious Diseases in Immunological Disorders, Global Infection Response, and Experimental Anti-Idiotypic Vaccine Candidates Against Microorganisms of Public Health Importance.
4. The flavonoid-sensing regulator AefR is involved in modulating quorum sensing through repressing the MexEF-OprN efflux pump in Pseudomonas fluorescens.
5. Molecular characterization of resistance and biofilm genes of ESKAPE pathogens isolated from clinical samples: examination of the effect of boric acid on biofilm ability by cell culture method.
6. Trends of neonatal sepsis and its etiology at Hawassa, Ethiopia: a five year retrospective cross-sectional study.
7. Mitochondria sense bacterial lactate and drive release of neutrophil extracellular traps.
8. Efficacy of non-cultured non-trypsinized dermabraded epidermal cell graft followed by narrowband ultraviolet B phototherapy in stable vitiligo.
9. Quantification of All-Trans Retinoic Acid and Cytokine Levels After Fungal, Viral and Bacterial Infections in the Lung.
10. Multimeric, multivalent fusion carrier proteins for site-selective glycoconjugate vaccines simultaneously targeting Staphylococcus aureus and Pseudomonas aeruginosa.
11. The lack of a biorepository during vaccine trials: A lost opportunity to understand staphylococcal immunity.
12. The impact of non-pharmacological interventions on nasopharyngeal Staphylococcus aureus, streptococcus pneumoniae, moraxella catarrhalis, haemophilus influenzae carriage and the change of pneumococcal vaccination in healthy children under 5 years old in Beijing, China.
13. Sequential Respiratory Syncytial Virus and Bacterial Infections in the Nasopharynx of Zambian Infants and Mothers.
14. Identification and characterization of amphipathic antimicrobial peptides with broad spectrum activity against multi-drug resistant bacteria.
15. Characterization of Hippo Signaling Components in the Early Dorsal Pancreatic Bud.
16. Mulberry Leaves-Derived Carbon Dots for Photodynamic Treatment of Methicillin-Resistant Staphylococcus aureus-Infected Wounds via Metabolic Perturbation.
17. Major antigenic differences in Aeromonas salmonicida isolates correlate with the emergence of a new strain causing furunculosis in Chilean salmon farms.
18. Surface display of LukF-PV on Bacillus subtilis spore for oral administration.
19. Investigation of the effect of anti-PIA/PNAG antibodies on biofilm formation in Escherichia coli.
20. Topical administration of mupirocin ointment and fusidic acid in bacterial infection-induced skin diseases.