**XF-73 Nasal Literature Review**

**Period: 24/08/2025 – 24/09/2025**

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Scientific Highlights

1. Nasal microbiome inhabitants with anti-Staphylococcus aureus activity.
2. Active screening and decolonization reduce the incidence of Staphylococcus aureus bacteremia and mortality in hemodialysis patients: An interrupted time series study in a hemodialysis unit.
3. Decolonisation and approaches to this for preventing surgical site infection.

SA Decolonisation

1. Panton-Valentine Leukocidin-Producing Community-Acquired Methicillin-Resistant Staphylococcus aureus in Skin and Soft Tissue Infections: Clinical and Epidemiological Insights From Japan.
2. Cocaine-Induced Midline Destructive Lesions-A Harbinger of Meningitis and Hydrocephalus.
3. Sinonasal Disease in Pediatric Patients With Cystic Fibrosis and the Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) I1234V Mutation in Qatar.
4. Risk factors of methicillin-resistant Staphylococcus aureus colonization in the nasal cavity of people living with HIV: a cross-sectional study from Dongyang hospital, Zhejiang Province.
5. Staphylococcus aureus induces miR-21 expression to promote bacterial persistence during nasal colonisation.
6. Investigation into Antibiotic Resistance Profiles of Staphylococcus aureus Among Chronic Rhinosinusitis Patients and Multifaceted Analysis of Factors Influencing Methicillin-Resistant Staphylococcus aureus Infection.
7. Targeted inhibition of mecA and agrA genes in clinical MRSA isolates by natural bioactive compounds.
8. Comparative analysis of colonization and survival strategies of regionally predominant LA-MRSA clones ST398 and ST9.
9. Draft genome sequence of Staphylococcus aureus N208 isolated from a nasal swab of a healthy female.
10. Occurrence and Antimicrobial Resistance Profiles of Staphylococcus spp. Strains Isolated From Healthy Stray Dogs.
11. Prevalence and antibiogram profiling of enterotoxigenic methicillin-resistant Staphylococcus aureus at bovine-human interface.
12. Multilocus sequence type analysis of coagulase-negative staphylococci from the neonatal intensive care unit of a teaching hospital in Ghana.
13. Mechanisms of 10-hydroxyoctadecanoic acid resistance in Streptococcus pneumoniae.
14. Nasal Staphylococcus aureus carriage promotes depressive behaviour in mice via sex hormone degradation.

SA / MRSA Colonisation / Infection

1. Microbubble-Controlled Delivery of Biofilm-Targeting Nanoparticles to Treat MRSA Infection.
2. Performance and potential utility of the BioFire Joint Infection Panel with synovial fluid and joint tissue specimens.
3. Phytochemical analysis and antimicrobial activity of Ganoderma lucidum against selected bacteria and fungi of medical importance.
4. Whole-genome sequencing and biofilm gene characterization in multidrug-Resistant Staphylococcus aureus clinical strains.
5. Incidence and Risk Factors for Hemodialysis Reliable Outflow Bypass Graft Infection.
6. Culturable macroplastic-associated potential human pathogens in coral reef lagoons, Madagascar.
7. Outcomes of End Stage Renal Disease in Patients With Infective Endocarditis: A Nationwide Population-Based Study.
8. Comparison of peripherally inserted central catheters and central venous catheters in burn patients: a retrospective cohort study.
9. Cloning and Functional Characterization of a Novel Brevinin-1-Type Peptide from Sylvirana guentheri with Anticancer Activity.
10. Immune response and clinical severity are shaped by skin-adapted Staphylococcus aureus in chronically infected patients.
11. Mixed Candida albicans-Staphylococcus aureus Biofilm Is Reduced by Light-Activated Nanocomposite with Phloxine B.
12. Antimicrobial Effect of Gentamicin/Heparin and Gentamicin/Citrate Lock Solutions on Staphylococcus aureus and Pseudomonas aeruginosa Clinical Strains.
13. Comparison of core genome multi-locus sequencing typing pipelines for hospital outbreak detection of common bacterial pathogens.
14. Distribution of Causative Organisms in Infective Endocarditis and Their Associated Mortality Risk: A Single-Centre Study From North Wales, United Kingdom.
15. Healthcare-associated infections and antimicrobial resistance in Canadian acute care hospitals, 2019-2023.
16. Device and surgical procedure-related infections in Canadian acute care hospitals, 2019-2023.
17. Chronic Airway Infection and Resistance Pattern in Children and Adults with Cystic Fibrosis in Oman: A Single-center Cross-sectional Study.
18. Biofilm control in printed dentures: Effectiveness of hygiene protocols in base and tooth resins.
19. Global Insights Into Spondylodiscitis: A Bibliometric Analysis of Four Decades of Research.
20. Incidence of surgical site infections in cerebrovascular surgery: a single-center cohort study.
21. Prevalence of methicillin-resistant Staphylococcus aureus and associated factors from surgical ward inpatients at Shaafi Hospital, Mogadishu, Somalia.
22. Molecular Prevalence and Antimicrobial Resistance Profile of Staphylococcus aureus and Staphylococcus pseudintermedius Isolated From Hospital-Visited Cats.
23. Long-term mortality in patients who survive surgery for infective endocarditis versus the background population: a nationwide study.
24. Patient Safety and Risk Management in an Accumulation of Postoperative Endophthalmitis Cases after Vitrectomy in a University Eye Clinic.
25. The bacterial etiology and antimicrobial susceptibility of lower respiratory tract infections in Vietnam.
26. The Clinic-in-a-Dressing Paradigm: Synchronized Diagnosis and Treatment in Chronic Wounds via Hydrogel-Nanofiber Matrices.
27. Prospective Whole Genome Sequencing to Aid the Identification and Control of Methicillin-Susceptible Staphylococcus aureus Transmissions in a Neonatal ICU.
28. Bacterial pneumonia co-infection in adult inpatients with coronavirus disease 2019 during the Omicron variants epidemic in Okinawa, Japan: risk factors and clinical outcomes.
29. Cyanine-scaffold fluorogenic probes for visual detection of nitroreductase in living bacteria.
30. Integrating FRET and Molecular Dynamics Simulation for Single-Molecule Aptameric Detection of Staphylococcus aureus IsdA Surface Protein.
31. Nutritional Immunity in Wound Infection: Unveiling the Role of Dietary Elements in Host-Pathogen Interaction.
32. Antibiotic resistance and factors associated with colonization dynamics of Staphylococcus aureus and Streptococcus pneumoniae in healthy children in Lima, Peru.
33. Infections resulting from wild land and aquatic species injuries: A case series from Mornington Peninsula, Australia.
34. Betel leaf-mediated zinc oxide nanoparticle-coated silk fibres: a sustainable approach for biomedical applications.
35. Timely excision of prophage Φ13 is essential for the Staphylococcus aureus infectious process.
36. [Clinical efficiency of polyvalent piobacteriophage in the complex treatment of nosocomial sinusitis].
37. [Debridement, antimicrobial therapy, and implant retention for acute periprosthetic infections].
38. The Atopic Dermatitis Continuum: An Updated Paradigm for a Common Disorder and a Novel Multipurpose Treatment Option.
39. Indolicidin derivatives as potent dual-action antifungal and antibacterial agents for the treatment of skin infections: A comprehensive study from in vitro to in vivo evaluation.
40. Update on infection prevention in the ICU.
41. Management of MDR/XDR severe infections in the critically ill.
42. Comparative Effectiveness of Continuous Versus Intermittent Negative Pressure Wound Therapy in the Management of Diabetic Foot Ulcers: A Prospective Observational Study.
43. Impact of preoperative body mass index on postoperative outcomes in infective endocarditis: a multicenter analysis of 4801 consecutive patients.
44. Anti-Inflammatory and Antimicrobial Effect of Ellagic Acid and Punicalagin in Dermal Fibroblasts.
45. Physical-Chemical Assessment and Antimicrobial Activity of Chlortetracycline-Loaded Collagen Sponges.
46. Bioengineered Chitosan-Collagen-Honey Sponges: Physicochemical, Antibacterial, and In Vitro Healing Properties for Enhanced Wound Healing and Infection Control.
47. Pseudomonas aeruginosa supports the survival of Prevotella melaninogenica in a cystic fibrosis lung polymicrobial community through metabolic cross-feeding.
48. Thiolated Hyaluronic Acid: A Gateway for Targeted Killing of Staphylococcus aureus on the Race for Surface Colonization.
49. Spinal epidural abscess of uncommon presentation following urinary tract infection: A case report.
50. Targeted Corneal Sensory Nerve Depletion via Subconjunctival Injection: A Model for Investigating Bacterial Adhesion and Neuroimmune Interactions.
51. Staphylococcus lugdunensis infective endocarditis: a multicentre international observational study.
52. Performance evaluation of a commercial multiplex pathogen panel for detection of bacteria in sputum specimens from non-ICU patients with suspected lower respiratory tract infection.
53. Multicenter epidemiological distribution, pathogens, and drug-resistance characteristics of chronic osteomyelitis in Central China.
54. Microbiological Spectrum and Demographic Distribution of Pathogens Causing Suppurative Inflammation of the Cervical Lymph Nodes in Patients Over 18 Years of Age: An Eight-Year Retrospective Study.
55. The Pandora's Box of Cardiac Devices: A Case of Infective Endocarditis Postpatent Foramen Ovale Closure.
56. Postoperative infection following anterior cervical fusion surgery caused by Prevotella oris: a case report.
57. Biotemplated Photocatalytic Micromotors for Effective Inhibition of Bacterial Growth.
58. A snail glycosaminoglycan-derived patch inspired by extracellular matrix accelerates diabetic wound healing via promoting re-epithelization.
59. Patients with tracheostomy as a primary risk factor for methicillin-resistant Staphylococcus aureus carriage in emergency intensive care unit admissions: A retrospective single-center observational study.
60. Ultrasmall Self-Cascade Bimetallic Au(2)Pd(3) Nanozymes Encapsulated Hydrogel Microneedles for Photothermal-Augmented Nanocatalytic Therapy of Diabetic Wound Infections.
61. Correction: Dual phage-incorporated electrospun polyvinyl alcohol-eudragit nanofiber matrix for rapid healing of diabetic wound infected by Pseudomonas aeruginosa and Staphylococcus aureus.
62. Comparative Effects of ZnO, MgO, and CaO Nanoparticles in 3D-Printed Chitosan-Agarose Scaffolds on Antibacterial and Osteogenic Outcomes.
63. MSSA Thoracic Mycotic Aneurysm Repaired with TEVAR: A Case Report.
64. Surveillance of Antibiotic Resistance and Molecular Epidemiology of Staphylococcus aureus in Baotou, Inner Mongolia, China.
65. Missed and mismanaged: severe consequences of Morel Lavallee lesions-a case series.
66. Psoriasis and Canine Exposure Leading to Recurrent Prosthetic Joint Infection: A Case Report.
67. Dual-recognition fluorescent immunochromatographic strip based on IgG and antibiotic for smartphone-assisted detection of Staphylococcus aureus in food samples.
68. A risk-based assessment of Enterococcal Bloodstream infection: Suggesting considerations in empirical therapy strategies in a tertiary care hospital.

Guidelines / Prevention Practice

1. A Retrospective Comparison of Bone Culture Techniques.

Breast Surgery

1. "Single-dose versus 24-hour antibiotic prophylaxis in reduction mammaplasty: a randomized controlled trial".
2. The Dome technique: A single-stage liposuction and dermopexy treatment for high-grade gynecomastia.
3. First report of adult Taenia solium in human brain with neurocysticercosis: illustrative case.
4. Mycobacterium tuberculosis infection following polyacrylamide hydrogel (Amazingel) breast augmentation: A case report and literature review.
5. A Multifunctional Microneedle Patch Combined with Quercetin Nanoparticles for Local Drug Release Therapy and Wound Healing after Skin Tumor Surgery.
6. Chlorhexidine vs. Povidone for Skin Antisepsis in Tissue Expander-Based Breast Reconstruction: A Propensity Score-Matched Analysis.
7. Breast Augmentation in Body Contouring Using Autologous Stem Cell-Enriched Fat Grafting: Fifteen-Year Clinical Experience.
8. Surgical Treatment, Rehabilitative Approaches and Functioning Assessment for Patients Affected by Breast Cancer-Related Lymphedema: A Comprehensive Review.
9. Promoting early detection of necrotizing soft tissue infection of the upper extremity in patients with history of breast cancer: a case report.
10. The impact of perioperative hypothermia on surgical site infection risk: a meta-analysis.
11. A case report of breast abscess caused by Peptoniphilus harei after endoscopic breast-conserving surgery and radiotherapy for breast cancer and literature review.
12. ASO Visual Abstract: SPARC Expression Induces COL1A1/COL3A1 Representing Aggressive Molecular Cancer-Associated Fibroblast Signatures and CSF1-Mediated Cancer Invasion in Colorectal Cancer.
13. Use of Antibiotic Prophylaxis for Surgical Site Infection Prevention in Nononcologic Breast Surgery: A Scoping Review.
14. Preliminary evaluation of pectoralis major fascia use in robotic nipple sparing mastectomy and immediate breast reconstruction with gel implant: a retrospective comparative cohort study.
15. Rapid progression and extensive lymph node metastases of papillary thyroid carcinoma in an HIV-positive patient: a Case Report.
16. Causes of Death After Surgery Among Cancer Patients: A Population-based Cohort Study.
17. Breast surgical site infections in patients undergoing lumpectomy with and without closure of defect.
18. Juvenile gigantomastia with pseudo angiomatous stromal hyperplasia in a 12-year-old female: a case report.
19. The Role of Synthetic Meshes in Revision Surgery After Breast Augmentation: A Personal Experience.
20. Is Antibiotic Prophylaxis Necessary in Mastectomy with Antimicrobial Sutures? A Comparative Analysis.
21. Necrotizing Fasciitis of Bilateral Breasts following Unilateral Modified Radical Mastectomy for Invasive Ductal Carcinoma: A Case Report and Review of Literature.
22. [Single-stage treatment of upper limb lymphedema following breast cancer surgery using superficial circumflex iliac artery perforator-based vascularized lymph node transfer combined with lymphaticovenular anastomosis and liposuction].
23. Occult breast cancer management with axillary lymph node dissection versus sentinel lymph node biopsy: Case reports and literature review.
24. Evaluating the Safety of Immediate Lymphatic Reconstruction With Implant-Based Breast Reconstruction: Eight-Year Institutional Review.
25. Robot-Assisted Versus Open Surgery in Early-Stage Breast Cancer: A Systematic Review and Meta-Analysis.
26. The impact of immediate lipofilling on oncological outcomes, complication rates and patient reported outcomes in breast conserving surgery: a systematic review and meta-analysis.
27. Surgical Site Infection (SSI) Prevention Bundle to Reduce the Incidence of Post-Mastectomy SSI Among Breast Cancer Patients at an Academic Medical Center: Effectiveness and Cost Consequence Analysis.
28. Bridging Safety and Efficacy; Neoadjuvant Chemotherapy Has Stable Complication Rates in Patients Treated With Oncoplastic Breast Surgery.
29. One or Two Drains? A Propensity Score-Matched Analysis of Postoperative Complications After Tissue Expander Placement.
30. Surgical management of accessory breast tissue: liposuction and mastectomy in axillary localization - a case series.

Mupirocin resistance

Competitors

1. Emergence of livestock-associated MRSA clonal complex 398 in Thailand's swine industry.
2. Ultrasound-enhanced Pt-coordinated polymer immunopotentiators and heterogenic fusion membrane-based multifunctional tumor vaccine nanoplatforms for melanoma treatment.
3. Pathobiont immune tuning: the untold consequences of Staphylococcus aureus exposure on host immunity.
4. Staphylococcical scalded skin syndrome: a case series description of a rare and critical disease in a tertiary pediatric center.
5. Bioengineered nanocomposite bacitracin zinc-loaded chitosan microspheres containing keratin/gelatin films for wound healing.
6. Staphylococci in Livestock: Molecular Epidemiology, Antimicrobial Resistance, and Translational Strategies for One Health Protection.
7. Staphylococcus aureus in Bovine Mastitis: A Narrative Review of Prevalence, Antimicrobial Resistance, and Advances in Detection Strategies.
8. Newly identified properties of known pharmaceuticals and myxobacterial small molecules revealed by screening for autophagy modulators.
9. DNA gyrase-inhibitory antimicrobial anthraquinone from the endophytic Sordariomycetes fungus Diaporthe perseae.
10. The Influence of Maternal S. aureus anti-Hla neutralizing antibody on infant skin and soft tissue (SSTI) development in the first year of life.
11. Isolation and Molecular Characterization of Three Staphylococcus pseudintermedius Strains from Dogs and Humans in Egypt.
12. Upscaling, toxicity and efficacy of multifaceted dressing embedded with dsirna-loaded gold nanoparticles for enhancing diabetic wound treatment.
13. Changes in carriage and serotype diversity of Streptococcus pneumoniae and other respiratory pathobionts in the UK between pre-PCV13 (2006-10), early-PCV13 (2010-12) and late-PCV13 (2012-23) periods.
14. Distinct effects of adjuvants on B cell responses to protein or polysaccharide antigens contained in glycoconjugate vaccines.
15. Overcoming Immune Evasion in Staphylococcus aureus: Strategies for Rational Vaccine Design.
16. Fabrication and characterization of agar-based hydrogel incorporating gelatin-coated silver nanoparticles with mupirocin for diabetic wound therapy.
17. Immunoinformatics design of multi-epitope vaccine candidates against "ESKAPE" pathogens as nosocomial infection.
18. A New Saponin From Tridax procumbens L.: In Vitro and In Silico Studies Reveal Broad Spectrum of Bioactivities.
19. A systematic review of asymptomatic colonisation with Group A Streptococcus in lower and middle income countries.
20. Clinical Impact of Influenza A Coinfection on Staphylococcus aureus Pneumonia during the 2024-2025 Influenza Season in New York City.
21. Cesarean delivery with low-dose combined spinal epidural in a patient with congenital central hypoventilation syndrome: a case report.
22. Burden of bacterial antimicrobial resistance 1990-2021 in China: a systematic analysis for the global burden of disease study 2021.
23. Gut commensal Lactobacillus strain induces a balanced trained immunity phenotype to enhance vaccine efficacy through JAK-STAT-SOCS pathway.
24. Molecular epidemiological characteristics of pertussis in a pediatric hospital in Jinan City, China, 2022 to 2024.