**XF-73 Nasal Literature Review**

**Period: 24/09/2025 – 24/10/2025**

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Scientific Highlights

1. Decolonization of methicillin-resistant Staphylococcus aureus - effectiveness of decolonization treatment.

SA Decolonisation

1. Occurrence of methicillin-resistant Staphylococcus aureus in healthy pets in Duhok Province, Kurdistan Region, Iraq.
2. Macromolecular alterations in Staphylococcus spp.: Pyrrolomycin-induced changes in the anomeric configuration of wall teichoic acids, membrane fluidity, staphyloxanthin induction, and protein structure and functionality.
3. Molecular Epidemiology, Antimicrobial Resistance, and Virulence Profiles of Staphylococcus aureus from Fish, Aquatic Environments, and Fish Handlers in Southeast Nigeria.
4. Antibiofilm Effects of N-Acetyl Cysteine on Staphylococcal Biofilm in Patients with Chronic Rhinosinusitis.
5. Pathoadapative Genomic Determinants of Staphylococcus aureus Community Skin Infections and Nasal Colonization.
6. Antibiotic Resistance and Molecular Characterization of Staphylococcus aureus Strains Colonizing the Nose and Pharynx.
7. Temporal Shifts in Pathogen Profiles Due to the COVID-19 Pandemic in a Romanian Pediatric Tertiary Hospital.
8. Nasal microbionts differentially colonize and elicit cytokines in human nasal epithelial organoids.
9. Patient-Specific Coculture of S. aureus and P. aeruginosa Enhances Epithelial Barrier Disruption and Virulence in CRS.
10. [Case report. Job syndrome as an unusual finding in a pediatric patient].
11. A novel cystic fibrosis mutation "delS1255" in a male diagnosed at birth.
12. Epidemiology and antimicrobial resistance of pathogens in pediatric sinus infections: a retrospective study at a Japanese otolaryngology clinic (2023-2025).
13. Dual Effects of Sodium Houttuyfonate Against Acute Rhinosinusitis: Antibacterial Action and Epithelial Barrier Repair Through the p38 MAPK/ERK Pathway.
14. Chaihu Guizhi decoction alleviates H1N1 influenza virus and Staphylococcus aureus co-infection in mice by reducing inflammatory cytokines and regulating Th17/Treg balance.
15. Blood to the Bone: Epistaxis Leading to Osteomyelitis.
16. Predictive Value of Methicillin-Resistant Staphylococcus aureus Nasal Swab PCR Assay for MRSA Pneumonia in Critically Ill Stroke Patients.
17. Nasal Colonizing Vancomycin-Resistant and Intermediate Staphylococcus aureus Among Admitted Patients: A Hospital Based Cross-Sectional Study.
18. Molecular identification of antibiotic-resistant and virulent Escherichia coli and Staphylococcus aureus isolated from dogs in Southern Benin.
19. Multimodal assessment of the prevention of surgical site infections in breast surgery in a French university hospital.
20. Multiple effects of the bacterial DNA-binding protein SarA on the life cycle of Staphylococcus aureus phages.
21. Characterization and diversity of methicillin-resistant Staphylococcus aureus in two hospitals in Gabon.
22. Nasal irrigation as an alternate method to monitor airway microbiology in cystic fibrosis.
23. Associations of NLR and SIRI with all-cause mortality among adults with nasal Staphylococcus aureus colonisation: a cross-sectional study of NHANES, 2001-2004.
24. Decremental Volumes of Toilet Flushing Water Effects on Bioaerosol Emission Characteristics: Health Risks for Exposure Populations With Nasal/Oral Breathing Patterns.
25. Zoonotic potential of methicillin-resistant Staphylococcus aureus isolated from pets and their owners in Bangladesh.

SA / MRSA Colonisation / Infection

1. Bacterial profile, their antimicrobial susceptibility pattern and associated factors of otitis media among children at selected private hospitals in Hargeisa City, Somaliland.
2. Treatment Success of Periprosthetic Joint Infections in Oncologic Endoprostheses After Standardization of Surgical Strategies-A Systematic Review of the Literature.
3. Clade-specific adaptation and global spread of Staphylococcus aureus ST188 with emergence of a multidrug-resistant MRSA sublineage.
4. Antibiotic treatment duration for isolated methicillin-susceptible Staphylococcus aureus native tricuspid valve endocarditis: a standardized multidisciplinary approach.
5. Gelatin-sodium alginate hydrogel infused with Onosma dichroanthum Boiss. root extract: Preparation, characterization, and application in wound dressing.
6. Aortic Root Abscess Causing Atrioventricular Block in a Patient With Infective Endocarditis: A Fatal Case.
7. Assessing healthcare workers as potential stool donors for faecal microbiota transplantation: a cross-sectional study of antimicrobial-resistant gut bacteria and enteropathogenic microorganisms.
8. Efficacy of Hydrogen Peroxide Vaporizing Against Methicillin-Resistant Staphylococcus aureus, Extended-Spectrum β-Lactamase-Producing Bacteria, and Clostridioides difficile.
9. Neonatal infection with Staphylococcus capitis NRCS-A in Iceland: A 12-year longitudinal, retrospective study of strains from patients, staff and the environment in a neonatal intensive care unit.
10. Radical surgical treatment of calcaneal osteomyelitis: clinical characteristics and treatment efficacy based on a synthesis analysis of 364 reported cases.
11. Global challenges of bacterial infections in organ transplantation: assessment of risk factors and predominant bacterial pathogen profiles threatening liver, kidney, heart, and lung transplant recipients.
12. Antimicrobial Resistance and Biofilm Formation in Bacterial Species Isolated from a Veterinary Hospital.
13. Repair Versus Replacement in Mitral Valve Endocarditis Due to Methicillin-Susceptible Staphylococcus aureus.
14. Antimicrobial Activity and Potential of Olive Leaf Extract as a Topical Agent to Combat Staphylococcus aureus and MRSA Strains: An In Vitro Evaluation.
15. Pyogenic Spondylodiscitis: Predictors of Microbiological Yield from Biopsy in a Tertiary Hospital.
16. Bacteriophage combined with mNGS enhances the specificity of bacterial infection diagnosis.
17. Impact of COVID-19 on the prevalence of multi-drug-resistant bacteria: a literature review and meta-analysis.
18. Efforts in surgical site infection surveillance at the Mbouo Protestant Hospital in Cameroon.
19. Infective Endocarditis 19 Months After Transcatheter Ostium Secundum Atrial Septal Defect Closure in a 6-Year-Old.
20. Percutaneous Orthotopic Transcatheter Tricuspid Valve Replacement for Native Valve Destruction After Endocarditis.
21. Effectiveness of Maggot Debridement Therapy for Chronic Wounds: A Systematic Review and Meta-Analysis of Randomised Controlled Trials.
22. Mechanisms of antibiofilm compounds JG-1 and M4 across multiple species: alterations of protein interactions essential to biofilm formation.
23. Prophylactic efficacy of probiotics and their metabolites against Staphylococcus epidermidis.
24. Multifunctional SISTP dressing integrating AI-screened hexapeptide for sustained antimicrobial release and redox homeostasis in infected wounds.
25. Microbiology of acute complicated sinus infections in children following the COVID-19 pandemic.
26. Microbiome-Targeted Probiotic Strategies for the Prevention and Treatment of Osteomyelitis: A Novel Biological Approach.
27. Orthopedic Device-related Infections in Children: Characteristics, Treatment and Outcomes.
28. Lyophilized horizontal platelet rich fibrin promotes the healing of infected burns/wounds by modulating macrophage polarization and fibroblast migration.
29. Study on the antibacterial activity and biocompatibility of nano-silver/carbon nanotube composite coatings on airway stents prepared by micro-transfer printing.
30. Epidemiology of Non-central Line-associated Primary Bloodstream Infections in a network of Indian Hospitals: A Prospective Surveillance Study over 7 years (2017-2024).
31. Diversity, Isolation and Bioactive Secondary Metabolites of Endophytic Fungi in Duchesnea indica (Andr.) Focke.
32. Exploring the Link Between Causative Agents of Healthcare-Associated Infections and Predisposing Factors Causing Extended Hospital Stays.
33. 3D Printing of Bacteriophage-Loaded Hydrogels: Development of a Local and Long-Lasting Delivery System.
34. Success rates of meticillin-resistant Staphylococcus aureus (MRSA) decolonization and factors associated with failure over a 16-year-period - an observational study.
35. Antibacterial property of lead telluride quantum dot layer fabricated on glass substrate.
36. Factors Associated with In-Hospital Mortality in Adult Patients with Community-Acquired Staphylococcus aureus Bacteremia: A Cross-Sectional Study.
37. Epidemiology of early-onset and late-onset invasive infections in Australian neonates and infants: a retrospective multicentre study.
38. Transfer of microorganisms to and from textiles in healthcare settings: a systematic review.
39. A Hybrid Approach in Treating a Mycotic Aneurism Caused by MRSA: A Case Report.
40. Extraction and Identification of the Bioactive Metabolites Produced by Curvularia inaequalis, an Endophytic Fungus Collected in Iran from Echium khuzistanicum Mozaff.
41. Surgery in Staphylococcus aureus Infective Endocarditis: Clinical Outcomes, Neurological Sequelae, and Prognostic Implications.
42. ESKAPE Pathogens in Bloodstream Infections: Dynamics of Antimicrobial Resistance from 2018 to 2024-A Single-Center Observational Study in Poland.
43. Real-World Use of Dalbavancin in Diabetic Foot Osteomyelitis: PEDDAL Study.
44. Pediatric necrotizing soft tissue infection: unveiling a rare complication of routine procedures - peripheral venous catheter insertion.
45. Prevalence and associated factors of methicillin-resistant and vancomycin-susceptible Staphylococcus aureus among clinical isolates at Hawassa university comprehensive specialized hospital, Ethiopia, 2019-2023.
46. Surgical lead extraction for pacemaker infection with tricuspid valve repair: A case report.
47. Clinical features and sequelae of pediatric osteomyelitis following surgical treatment: a 10-year retrospective study.
48. Silent but Significant: A Case of Indwelling Chemoport-Associated Eustachian Valve Endocarditis.
49. Hyaluronic acid-based bilayer microneedles integrating a polydopamine-indocyanine green nanoplatform and curcumin for near-infrared-activated antibacterial therapy.
50. A Bench Study Comparing the Performance of a Novel Test Lung with a Conventional Model.
51. Vertebral bone marrow clot breakthrough: a powerful osteogenic and antibacterial scaffold for spinal fusion surgery.
52. Spirulina protein isolate/carboxymethyl chitosan based emulsion gel with pH/enzyme-responsive release of curcumin for enhanced infected wound healing.
53. Acid-Responsive Bimetallic Peroxide Composite Nanoplatform for Synergistic Therapy of Drug-Resistant Bacterial Infections via Inducing Oxidative Stress and Disrupting Bacterial Energy Metabolism.
54. Epidemiology of bone and joint infection in Pacific children from the Auckland Region, 2018-2023.
55. Epidemiology and treatment of surgical infections after distal radius fractures: a systematic review.
56. Cutaneous botryomycosis: a comprehensive review.
57. Urease promotes pH homeostasis and growth of Staphylococcus aureus in skin-like conditions.
58. Hemolytic activity and antibiotic resistance profiles of Staphylococcus aureus isolates from clinical patients.
59. Bacterial contamination and infection control practices in the mortuary at Mbarara Regional Referral Hospital, Uganda.

Guidelines / Prevention Practice

1. Mechanical bowel preparation plus oral antibiotics reduces surgical site infection and anastomotic leak rates in elective colorectal cancer surgery: A systematic review and meta-analysis of randomised controlled trials.
2. Antibiotics and Surgical Site Infection in Expander-Based Breast Reconstruction Trial (ASSERT).
3. Guideline-concordant antibiotic prescribing for community-acquired bacterial pneumonia (CABP) due to drug-resistant pathogens in the All of Us database.

Breast Surgery

1. Open preperitoneal abdominal wall reconstruction (AWR) for patients with deep inferior epigastric perforator (DIEP) or transverse rectus abdominis myocutaneous (TRAM) flap hernias.
2. Postoperative complications following prepectoral versus subpectoral tissue expander placement in immediate breast reconstruction: a retrospective study from Japan.
3. Nipple Reconstruction Using FixNip NRI: A Novel Nipple Reconstruction Implant (First-in-human Trial).
4. Innovative Surgical Techniques for Gynecomastia: Enhancing Patient Aesthetic Satisfaction.
5. An effective four-step approach in treating refractory seroma after mastectomy for breast cancer.
6. The global, regional, and national burden of cancer, 1990-2023, with forecasts to 2050: a systematic analysis for the Global Burden of Disease Study 2023.
7. Electrocautery vs. Cold Cutting in Modified Radical Mastectomy: A Systematic Review and Meta-Analysis.
8. Ultrasound-assisted periareolar oncoplastic approach in breast surgery: a focus on surgical technique.
9. Preoperative use of serotonergic antidepressants is associated with increased rates of complications and surgical revision in autologous breast reconstruction.
10. Early Outcomes Using TIGR Mesh in Direct-to-Implant Breast Reconstruction.
11. Impact of non-tobacco nicotine use on postoperative complications in breast reduction: A propensity score-matched analysis.
12. Subpectoral to prepectoral pocket change in implant-based breast reconstruction: A retrospective cohort study at a single institution.
13. Bacteriology of non-oncologic post-operative breast infections: A retrospective cross-sectional study to guide empiric antibiotic coverage.
14. Prophylactic Antibiotic-Loaded Cement, Absorbable and Non-Absorbable, for Implant-Based Breast Reconstruction.
15. The 3-Year Results of a 100-Patient Prospective Study of Safety and Effectiveness of Mia Femtech.
16. Prepectoral vs Subpectoral Implant-Based Breast Reconstruction: Evaluating the Shift.
17. Perioperative Vitamin D Insufficiency Impacts Postoperative Outcomes in Abdominally Based Breast Reconstruction.
18. Impact of COVID-19 on Time to Treat Breast Cancer and Racial Disparities Among Women in the Military Health System From FY2018-2022.
19. Impact of Prior Radiation on Postoperative Complications Following Elective Implant Exchange.
20. Litigation and Complications Arising from Aesthetic Body Surgery: A Systematic Review.
21. Pocket Conversion from Prepectoral to Retropectoral Implant Placement in Breast Reconstruction: A Cost-effective Solution for High-Grade Rippling and Implant Visibility.
22. The Use of Water-assisted Liposuction for Breast Deformity Induced by Polyacrylamide Hydrogel.
23. Postoperative complications and their risk factors in breast cancer patients treated with neoadjuvant chemotherapy.
24. Surgeon Performed Vacuum Assisted Breast Biopsy/Excision Is a Viable Paradigm for the Management of Benign and B3 Lesions-An Australian Multicenter Experience.
25. Robotic nipple-sparing mastectomy with immediate prosthetic reconstruction: A prospective study about 138 consecutive procedures.
26. "Safety and efficacy of early drain removal in breast reconstruction: a retrospective cohort study".
27. Effect of Acellular Dermal Matrix in Postoperative Outcomes in Tissue Expander Breast Reconstruction After Immediate Mastectomy.
28. [Perioperative management of direct-to-implant-based breast reconstruction in breast cancer patients and West China Hospital experiences].
29. Global burden of 292 causes of death in 204 countries and territories and 660 subnational locations, 1990-2023: a systematic analysis for the Global Burden of Disease Study 2023.
30. Burden of 375 diseases and injuries, risk-attributable burden of 88 risk factors, and healthy life expectancy in 204 countries and territories, including 660 subnational locations, 1990-2023: a systematic analysis for the Global Burden of Disease Study 2023.
31. Nocardia Nova bacteremia and viral pneumonia in a breast cancer patient post modified radical mastectomy: a case report.
32. Can the Use of Closed Incision Negative Pressure Wound Therapy in Immediate Prepectoral Breast Reconstruction With Polyurethane-coated Implants Reduce the Rate of Early Complications? : A Comparative Study.

Mupirocin resistance

Competitors

1. Taming the Rash: A Dermatological Case Report on Effective Treatments for Refractory Folliculitis.
2. Patient-reported perceptions, experiences and preferences around intravenous and oral antibiotics for the treatment of Staphylococcus aureus bacteremia: a descriptive qualitative study.
3. A multivalent mRNA-LNP cocktail vaccine confers superior efficacy against Staphylococcus aureus infection in murine models.
4. Characterisation of nasopharyngeal colonisation by Staphylococcus aureus and the factors associated with colonisation in comorbid adults in a low- and middle-income country.
5. A new efficient skin dressing based on sodium alginate - graphene oxide bionanocomposite hydrogel to expedite wound healing process.
6. Etiology and antimicrobial resistance patterns of sepsis in infants 0-59 days old in Jimma, Ethiopia: a longitudinal study.
7. Multi-epitope vaccine construct against Staphylococcus aureus: insights from immunoinformatics and molecular dynamics simulations.
8. Vaccines as Potential Frontliners Against Antimicrobial Resistance (AMR): A Focused Review.
9. Comparison of Efficacy in the Treatment of Otomycosis using 10% Povidone-Iodine and Clotrimazole Solution: Randomized, Double-Blind Control Trial.
10. Isotype conversion of Staphylococcal-specific IgG into IgM broadens the reactivity to other bacterial pathogens.
11. Determination of Potential Inhibitors against Mycobacterium tuberculosis, Staphylococcus aureus, and Helicobacter pylori Shikimate Dehydrogenase by using Virtual Screening.
12. The burden of bacterial antimicrobial resistance in the WHO Eastern Mediterranean Region 1990-2021: a cross-country systematic analysis with forecasts to 2050.
13. Alpha-toxin-elicited CX(3)CL1 release in Staphylococcus aureus pneumonia impairs bactericidal function of human monocytes.
14. Pathogen-specific kinetics of oxidative burst in camel leukocytes: Influence of serum opsonization on reactive oxygen species production.
15. Alpha hemolysin enhances the immune response by modulating dendritic cell differentiation via ADAM10-Notch signaling.
16. Time trends in the burden of non-COVID-19 lower respiratory tract infections among children aged 0 to 14 years.
17. Development of a novel rapid visual LAMP platform for detection of methicillin-resistant Staphylococcus aureus (MRSA) in food.
18. The impact of interferon-γ pathway on trained immunity induction by vaccination with Bacille Calmette-Guérin.
19. Zonal endothelial cell heterogeneity underlies murine renal vascular development.
20. Predictors of respiratory failure and survival in myotonic dystrophy type 1.
21. Relationship Between Group 3 Innate Lymphoid Cells and Th17 in Human Nasopharynx-Associated Lymphoid Tissue and the Association With Pneumococcal Carriage.