**XF-73 Nasal Literature Review**

**Period: 24/03/2025 – 24/04/2025**

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Scientific Highlights

1. Competing Interests: Vancomycin Use in Trauma Patients is Similar During Methicillin-Resistant Staphylococcus aureus Nasal Swab Based De-Escalation and Universal Mupirocin Decolonization Protocols.

SA Decolonisation

1. Haemophilus influenzae remains the predominant otitis media pathogen in Australian children undergoing ventilation tube insertion in the PCV13 era.
2. Amorphous Roxithromycin Loaded in-situ Gel for the Treatment of Staphylococcus aureus Induced Upper Respiratory Tract Infection.
3. Burkholderia cenocepacia-mediated inhibition of Staphylococcus aureus growth and biofilm formation.
4. Prevalence and Risk Factors of Staphylococcus aureus Nasal Colonization in Horses Admitted to a Veterinary Teaching Hospital.
5. Optimization of a multiplex PCR assay for simultaneous detection of key bovine respiratory infections.
6. Molecular characterization and antimicrobial-resistance gene profile of Staphylococcus aureus strains isolated from ovine mastitis in Jordan.
7. Sex-dependent gastrointestinal colonization resistance to MRSA is microbiota and Th17 dependent.
8. The role of veterinary drug use in driving antimicrobial resistance of Staphylococcus aureus isolates in smallholder swine farms in Central Vietnam.
9. Mouse model of Staphylococcus aureus- and Pseudomonas aeruginosa-induced neutrophilic chronic rhinosinusitis.
10. The nasal microbiome modulates risk for SARS-CoV-2 infection.
11. Clinical and genetic analysis of oral and nasal staphylococcus aureus isolates in dental patients.
12. Role of CD44(+)CCR2(+)CD64(-)monocyte-derived macrophage in chronic rhinosinusitis with nasal polyps.
13. How does Staphylococcus aureus successfully colonize the nasal cavity.
14. Exploration of IgE Specific to Staphylococcal Serine Protease-Like Protein A as a Phenotypic Marker in Late-Onset Asthma.
15. Methicillin-resistant Staphylococcus aureus GG0398 on livestock farms and meat in the Netherlands.
16. Phytochemical Analysis, Antimicrobial and Anti-Inflammatory Efficacy of Leucas aspera Leaf Extracts.
17. TEAL-Seq: targeted expression analysis sequencing.

SA / MRSA Colonisation / Infection

1. Laminaria japonica polysaccharide nano‑silver film with synergistic antibiosis for wound healing.
2. Animal Models of Orthopedic Implant-Associated Infections and Revisions.
3. Sericin-Assisted Green Synthesis of Gold Nanoparticles as Broad-Spectrum Antimicrobial and Biofilm-Disrupting Agents for Therapy of Bacterial Infection.
4. Vancomycin Population Pharmacokinetic Models in Non- Critically Ill Adults Patients: a scoping review.
5. Prevalence, Determinants, and Antibiotic Resistance Patterns of Urinary Tract Infections in Antenatal Women in an Urban Resettlement Colony and Slum in Delhi, India: A Cross-sectional Study.
6. Clinical and epidemiological profile of infective endocarditis in Chile - A systematic review of descriptive analysis.
7. Wear-resistant antibacterial UHMWPE-based implant materials obtained by radiation crosslinking.
8. Use of multiplex molecular respiratory panel in COVID-19 patients with suspected co-infections: Insights and considerations in results interpretation.
9. Replicative selfish genetic elements are driving rapid pathogenic adaptation of Enterococcus faecium.
10. Kaposi Sarcoma Masquerading as Methicillin-Resistant Staphylococcus aureus Soft Tissue Infection of the Foot in an Immunocompromised Transgender Female.
11. A Rare Case of Prosthetic Mitral Valve Endocarditis With Atrial and Ventricular Lead Infections.
12. Pathogens Causing Surgical Site Infections After Lower Uterine Caesarean Sections and Recommendations for Antibiotic Guidelines.
13. [A case of acute pseudomembranous necrotizing tracheobronchitis in an adult].
14. Preparation and characterization of a novel oligomeric gum from Eucommia ulmoides crosslinked with carboxymethyl chitosan antibacterial wound dressing for quick hemostasis.
15. Culturomics of the pig tonsil microbiome identifies new species and an untapped source of novel antimicrobials.
16. Tumor cells that resist neutrophil anticancer cytotoxicity acquire a prometastatic and innate immune escape phenotype.
17. Antibiotic resistance in equine dermatology: what should we do?
18. Preventing Orthopedic Infections.
19. Eosinophil innate immune memory after bacterial skin infection promotes allergic lung inflammation.
20. Current Antibiotic Resistance Profile of ESKAPE Pathogens in a Nepalese Hospital: A Cross-Sectional Study.
21. Comparing the Clinical and Microbiological Effects of Antibacterial-Coated Vicryl Suture and Non-Coated Vicryl Suture after Minor Oral Surgical Procedures.
22. Bacterial etiology and antimicrobial resistance in bloodstream infections at the University of Gondar Comprehensive Specialized Hospital: a cross-sectional study.
23. Complete genome sequence, metabolic profiling and functional studies reveal Ligilactobacillus salivarius LS-ARS2 is a promising biofilm-forming probiotic with significant antioxidant, antibacterial, and antibiofilm potential.
24. The Influence of Surface Damage on Miniplates: A Study of Bacterial Attachment Across Various Strains.
25. Prevalence and predictors of multidrug resistant organism infections in critically ill patients with opioid use disorder: a multicenter retrospective cohort study.
26. Antibiotic therapy and clinical outcomes of penicillin-susceptible Staphylococcus aureus (PSSA) bloodstream infection (BSI): a ten-year retrospective cohort study.
27. Pyogenic Vertebral Osteomyelitis.
28. Skin Microbiome Dynamics in Atopic Dermatitis: Understanding Host-Microbiome Interactions.
29. Readmission Rate After Methicillin-Resistant Staphylococcus aureus (MRSA) Infection: A Retrospective Study.
30. Epicatechin gallate and its analogues interact with sortase A and β-lactamase to suppress Staphylococcus aureus virulence.
31. Development of an Alginate Gel Composite with Antibacterial Properties Capable of Binding Calcium-Based Residual Stone Fragments in Endoscopic Stone Surgery.
32. Effects of a Moisturizer Containing Colloidal Oatmeal and Filaggrin Technology on Staphylococcus Species In Vitro.
33. Combating Concomitant Bacterial and Fungal Infections via Codelivery of Nitric Oxide and Fluconazole.
34. Determination of Pathogens in Deep Surgical Site Infections Following Sinus Tarsi Approach Calcaneal Fracture Surgery via Open Reduction Internal Fixation or Primary Arthrodesis - Implications for Prophylaxis and Treatment.
35. Non-invasive ultrasonic debridement of implant biofilms via hydrogen-sulfide releasing peptide nanoemulsions.
36. Comparative Evaluation of the Antimicrobial Efficacy of Endodontic Sealers Against Staphylococcus aureus and Streptococcus mutans: An In Vitro Study.
37. Antimicrobial prescription patterns in tertiary care centres in India: a multicentric point prevalence survey.
38. Antimicrobial Activity of Poly(methyl methacrylate) Doped with CuO and ZnO Nanoparticles.
39. SAAP-148 and halicin exhibit synergistic antimicrobial activity against antimicrobial-resistant bacteria in skin but not airway epithelial culture models.
40. Intervention of Corynebacterium striatum in the sessile lifestyle of Staphylococcus aureus wild-type and mutants for ica genes in polymicrobial biofilms.
41. BACTERIOCIN AP7121 AS A POTENTIAL TREATMENT FOR SURGICAL SITE INFECTIONS BY Staphylococcus aureus: in vitro/in vivo MODELS.
42. Surgical management of fracture-related infection (FRI) in the proximal femur: treatment options and long-term outcome.
43. Bilateral sequential bacterial dacryoadenitis with abscess- a case report.
44. Ca(2+) crosslinked gelatin-sodium alginate film loaded with berberine hydrochloride that can effectively promote wound healing of MRSA infection.
45. Epidemiology and Microbiology of Healthcare-Associated Infections in Neurosurgery Department: A Cross-Sectional Study.
46. Design and Synthesis of Triazole-Based p-tert-Butylcalix[4]Arene Conjugates and Evaluation of Their Antimicrobial, Antibiofilm, and Anti-Quorum-Sensing Activities.
47. The Importance of Systemic Inflammatory Response Syndrome in Diagnosing Occult Infections: A Case Report.
48. Necrotizing Fasciitis Due to Acinetobacter baumannii Complex Following Body Contouring Surgery: First Case Report.
49. Effects of intravenous morphine and lidocaine on bacterial growth.
50. Immune response against antibiotic-resistant and antibiotic-sensitive staphylococcus aureus in a rat model of implant infection.
51. Changing epidemiology of MRSA-CC398 in Spanish hospitals located in areas with different pig farming densities: a 2023 multicentre study.
52. Geranium essential oil downregulates virulence genes and mitigates MRSA wound infections through a multifunctional hydrogel.
53. Protection with a collagen wound matrix containing polyhexamethylene biguanide supports innate wound healing in biofilm-infected porcine wounds.

Guidelines / Prevention Practice

1. Surgical Site Infection Rates in Five Middle Eastern Countries: International Nosocomial Infection Control Consortium Findings.
2. Frequency of Antibiotic Overtreatment and Associated Harms in Patients Presenting With Suspected Sepsis to the Emergency Department: A Retrospective Cohort Study.
3. Value of the urine culture and antibiotic prophylaxis before partial nephrectomy in cancer (UroCCR n°107 - NephroBacte).

Breast Surgery

1. Modified radical mastectomy under local anesthesia using Tumescent Technique experience of Teaching Hospitals in Iraq.
2. Postoperative Outcomes of One-Step Implant-Based Breast and Ovarian Surgery in High-Penetrance Gene Mutation: A Single-Center Experience.
3. Racquet Mammoplasty as an Oncoplastic Technique in the Management of Lateral Quadrant Breast Cancer: A Prospective Controlled Study of Oncologic and Cosmetic Outcomes.
4. Application of human breast acellular dermal matrix (hbADM) in sling surgery for female stress urinary incontinence: a phase 1 clinical trial.
5. Postoperative complications of ADM use in previously irradiated patients during stage I of implant-based breast reconstruction: A national database propensity score-matched analysis.
6. Reducing Postoperative Complications in High-Risk Breast Surgery Patients: A Preliminary Study on the Efficacy of NPWT Dressing.
7. Utility of Excision and Direct Closure in Burns: A Case Report and Review of the Literature.
8. A prospective study of vaginal topical pretreatment of compound sea-buckthorn oil suppository in postmenopausal women prior to colposcopy.
9. Improving Outcomes in Immediate Prepectoral Reconstruction of Large and Ptotic Breast: The Reliability of Fifth Anterior Intercostal Artery Perforator Flap.
10. Effectiveness of intrapartum azithromycin to prevent infections in planned vaginal births in low-income and middle-income countries: a post-hoc analysis of data from a multicentre, randomised, double-blind, placebo-controlled trial.
11. Smoking increases breast toxicity despite adjuvant hypofractionated IMRT in early breast cancer.
12. The current state of tranexamic acid in mastectomy and breast reconstruction: A systematic review and meta-analysis.
13. RETRACTION: Comprehensive Analysis of Risk Factors for Postoperative Wound Infection Following Radical Mastectomy in Breast Cancer Patients.
14. Limited impact of body mass index on the risk of postoperative complications after implant-based breast reconstruction: A retrospective cohort study of 1847 patients.
15. Two-stage prepectoral breast reconstruction: A comprehensive review and meta-analysis.
16. A Meta-analysis of Breast Implant Irrigation Solutions' Effect on Infection and Capsular Contracture Frequencies.
17. Complications After Deep Inferior Epigastric Perforator Flap Breast Reconstruction for Nipple-Sparing Mastectomy: A Series of 380 Flaps.
18. The Use of Low-Dose Chlorhexidine Gluconate Irrigation in Preventing Intraoperative Contamination in Tissue Expander-Based Breast Reconstruction.
19. Safety and Racial Implications of Same-Day Discharge in Alloplastic Breast Reconstruction Following the COVID-19 Pandemic.
20. Approach to the Pediatric Poland Syndrome Patient: A 20-Year Academic Experience and Update of the Literature.
21. Impact of High Food Swamp Scores on Breast Reduction Outcomes: A Multivariate Analysis of 1052 Patients.
22. Trends in Acellular Dermal Matrix Utilization in Postmastectomy Tissue Expander Placement: An 11-Year Retrospective Study.
23. "Evaluation of Single-Port Endoscopic Nipple/Skin -Sparing Mastectomy with Prepectoral Breast Implant Reconstruction in Clinical Practice".
24. AI Risk Prediction Tools for Alloplastic Breast Reconstruction.
25. Current approaches to breast reconstruction: A scoping review of outcomes and factors influencing core outcome sets.
26. Postoperative complications in breast reconstruction with deep inferior epigastric perforator flap: Looking for evidence.
27. Oncoplastic Breast-Conserving Surgery Outcomes in the Hispanic Population at a Large County Hospital.
28. Biologic Response With and Without Acellular Dermal Matrix in Breast Reconstruction.
29. Staged Mastopexy or Mammaplasty Prior to Nipple-Sparing Mastectomy: A Systematic Review of Safety and Nipple-Areola Complex Outcomes.
30. Comparison of the incidence and severity of postoperative sore throat and subglottic airway injury with cylindrical versus tapered cuff endotracheal tubes in women undergoing surgery for breast cancer: a randomized controlled trial.
31. Exploring the Rise in Adolescent Reduction Mammaplasty: An 11-Year National Analysis.
32. Course Review-Ultrasound for Plastic Surgeons October 2024.
33. Non-cancer risks among female breast cancer survivors: a matched cohort study in Japan.
34. Post-mastectomy wound care - need for an empathetic approach.
35. RETRACTION: Effect of Prolonged Antibiotic Prophylaxis on the Occurrence of Surgical Site Wound Infection after Instant Breast Reconstruction: A Meta-Analysis.
36. Regional Differences in the Frequency of BRCA1 and BRCA2 Variants in Northeastern Japan: A Cohort Study.
37. Extended reality for mapping perforator-based flaps in breast reconstruction: a systematic review and meta-analysis.
38. [Free latissimus dorsi myocutaneous flap transplantation combined with external fixation for bone and soft tissue defects around knee joint].
39. Efficacy and Safety of Robotic Bilateral Axillo-Breast Approach Versus Robotic Gasless Axillary Approach for Thyroidectomy: A Systematic Review and Meta-Analysis.
40. Axillary Lymph Node Dissection With and Without Immediate Lymphatic Reconstruction: Association With Drain Days and Seromas.
41. The Impact of COVID-19 on "Reconstructive Burnout" Following Mastectomy.
42. Risk Factors for Totally Implantable Access Ports Associated Complications in Breast Cancer Patients.
43. The Five-Item Modified Frailty Index (mFI-5) Predicts Adverse Short-term Outcomes in Patients Undergoing Mastectomy: A Propensity Score-Matched Analysis of 252,054 Cases.
44. Early identification and rapid repositioning of a malpositioned infusion port catheter under real-time ultrasound guidance: A case report.

Mupirocin resistance

1. Pathogen-targeting biomineralized bacterial outer membrane vesicles for eradicating both intracellular and extracellular Staphylococcus aureus.
2. Prevalence, antibiogram, and risk factors of methicillin-resistant Staphylococcus aureus (MRSA) asymptomatic carriage in Africa: a systematic review and meta-analysis.

Competitors

1. Aminobisphosphonates Potentiate Non-Specific Immunological Memory.
2. Respiratory Microbiota and Health Risks in Children with Cerebral Palsy: A Narrative Review.
3. Imaging oligomers of alpha-toxin (Hla) variants using high-speed AFM and neutralizing Hla hemolytic activity with their antisera.
4. Identification of cross-reactive vaccine antigen candidates in Gram-positive ESKAPE pathogens through subtractive proteome analysis using opsonic sera.
5. New cross-disciplinary sleep medicine residency in France: Results after five years.
6. Global trends in staphylococcus aureus-related lower respiratory infections from 1990 to 2021: findings from the 2021 global burden of disease report.
7. Mineralized Bacteria as a Potent Vaccine Against Staphylococcus aureus Infections.
8. Pathogen-derived peptidoglycan skeleton enhances innate immune defense against Staphylococcus aureus via mTOR-HIF-1α-HK2-mediated trained immunity.
9. Synthetic biology routes to new and extinct natural products.
10. Back to the future? Drastic drop in serotype 19A carriage in daycare centers within two years after a second switch to PCV13 in Belgium.
11. Characteristics, outcome, and prognostic factors of young patients with central nervous system World Health Organization grade 3 oligodendrogliomas IDH-mutant and 1p/19q codeleted: A French POLA network study.
12. Insights into Molecular Profiles, Resistance Patterns, and Virulence Traits of Staphylococci from Companion Dogs in Angola.
13. Ozenoxacin 1% in Pediatric and Adult Patients with Impetigo: A Meta-Analysis of Randomized Trials.
14. The Epidemiology of Repeatedly Positive Bacterial Skin Infections in Auckland Children, New Zealand.
15. Pd@Au Nanoframe Hydrogels for Closed-Loop Wound Therapy.
16. Structural analysis shows the mode of inhibition for Staphylococcus aureus lipase by antipsychotic penfluridol.
17. The WHO Bacterial Priority Pathogens List 2024: a prioritisation study to guide research, development, and public health strategies against antimicrobial resistance.
18. Maternal transfer of anti-GAPDH IgG prevents neonatal infections caused by Staphylococcus aureus and group B Streptococcus.
19. A SpA+LukAB vaccine targeting Staphylococcus aureus evasion factors restricts infection in two minipig infection models.