

OUTPUT/ PUBLICATIONS - KFSP BacVivo – “Precision medicine for bacterial infections”

Original articles

1. T. C. Scheier, J. Franz, M. Boumasmoud, F. Andreoni, B. Chakrakodi, B. Duvnjak, A. Egli, W. Zingg, A. Ramette, A. Wolfensberger, R. D. Kouyos, S. D. Brugger Fourier-transform *faecium*: performance analysis and outbreak investigation, *Microbiol Spectr*. 2023 Sep 22;e0098423. doi: 10.1128/spectrum.00984-23. Online ahead of print
2. Anna K. Rätz, Federica Andreoni, Mathilde Boumasmoud, Judith Bergada-Pijuan, Tiziano A. Schweizer Srikanth Mairpady Shambat, Barbara Hasse, Annelies S. Zinkernagel, Silvio D. Brugger. Limited Adaptation of *Staphylococcus aureus* during Transition from Colonization to Invasive Infection *Microbiol Spectr*. 2023 June 21, doi: 10.1128/spectrum.02590-21
3. Huemer M, Mairpady Shambat S, Hertegonne S, Bergada-Pijuan J, Chang Ch, Pereira S, Gómez-Mejia A, Van Gestel L, Bär J, Vulin C, Pfammatter S, Stinear TP, Monk IR, Dworkin J, Zinkernagel AS. Serine-threonine phosphoregulation by PknB and Stp contributes to quiescence and antibiotic tolerance in *Staphylococcus aureus* *Sci Signal* 2023 Jan 3;16(766):eabj8194. doi: 10.1126/scisignal.abj8194. Epub 2023 Jan 3.
4. Reiber C*, Bodendoerfer E*, Brugger SD, Eberhard N, Hitz E, Hofmaenner D, Herren S, Kolsenik-Goldmann N, Manicini S, Röthlin K, Zbinden R, Zinkernagel AS, Hasse B. Rapid Antimicrobial Susceptibility Testing in Patients with Bacteremia due to Enterobacteriales: Impact in Clinical Routine *Swiss Med Wkly*. 2023 accepted
5. Gómez-Mejia A, Arnold K, Bär J, Singh KD, Scheier TC, Brugger SD, Zinkernagel AS, Sinues P. Rapid detection of *Staphylococcus aureus* and *Streptococcus pneumoniae* by real-time analysis of volatile metabolites *iScience* 2022 Sep 6;25(10):105080
6. Bergadà-Pijuan J*, Frank M*, Boroumand S*, Hovaguimian F, Mestres CA, Bauernschmitt R, Carrel TP, Ruschitzka F, Zinkernagel AS, Kouyos RD, Hasse B. Antibiotic prophylaxis before dental procedures to prevent infective endocarditis: a systematic review. *Infection* 2023 Feb;51(1):47-59
7. Daehler R, Brugger SD, Frank M, Greutmann M, Sromicki J, Marques-Maggio E, Imkamp F, Bauernschmitt R, Carrel TP, Zinkernagel AS, Hasse B. A retrospective analysis of blood culture-negative endocarditis at a tertiary care center in Switzerland. *Swiss Med Wkly*. 2022 Dec 10;152:40012
8. Schweizer TA, Andreoni F, Acevedo C, Scheier TC, Heggli I, Marques Maggio E, Eberhard N, Brugger SD, Dudli S, Zinkernagel AS. Intervertebral disc cell chondroptosis elicits neutrophil response in *Staphylococcus aureus* spondylodiscitis *Front Immunol* 2022 Jul 28;13:908211. doi: 10.3389/fimmu.2022.908211. eCollection 2022.
9. Husmann L, Huellner MW, Gruenig H, Ledermann B, Messerli M, Mestres CA, Rancic Z, Hasse B, and the Vasgra Cohort*, Imaging Characteristics and Diagnostic Accuracy of FDG-PET/CT, Contrast Enhanced CT and Combined Imaging in Patients with Suspected Mycotic or Inflammatory Abdominal Aortic Aneurysms. *PLoS One*. 2022 Aug 9;17(8):e0272772
10. Boumasmoud M, Dengler Haunreiter V, Schweizer TA, Meyer L, Chakrakodi B, Schreiber PW, Seidl K, Kühnert D, Kouyos R, Zinkernagel AS. Genomic Surveillance of Vancomycin-Resistant *Enterococcus faecium* Reveals Spread of a Linear Plasmid Conferring a Nutrient Utilization Advantage Annual report 2022 Page 10 *mBio* 2022 Apr 26;13(2):e0377121. doi: 10.1128/mbio.03771-21. Epub 2022 Mar 28.
11. Hofmaenner DA, Wendel Garcia PD, Blum MR, David S, Schuepbach RA, Buehler PK, Frey PM, Zinkernagel AS, Silvio D Brugger SD. The importance of intravenous immunoglobulin treatment in critically ill patients with necrotizing soft tissue infection: a retrospective cohort study *BMC Infect Dis* 2022 Feb 21;22(1):168. doi: 10.1186/s12879-022-07135-6.
12. Julian Bär, Mathilde Boumasmoud, Srikanth Mairpady Shambat, Clément Vulin, Markus Huemer, Tiziano A. Schweizer, Alejandro Gómez-Mejia, Nadia Eberhard, Yvonne Achermann, Patrick O.

- Zingg, Carlos A. Mestres, Silvio D. Brugger, Reto A. Schuepbach, Roger D. Kouyos, Barbara Hasse, Annelies S. Zinkernagel Quantification of within-patient *Staphylococcus aureus* phenotypic heterogeneity as a proxy for the presence of persisters across clinical presentations Clin Microbiol Infect. 2022 Feb 3:S1198-743X(22)00045-3. doi: 10.1016/j.cmi.2022.01.021
13. Herren S, Huemer M, Acevedo C, Gómez Mejia A, Andreoni F, Mairpady Shambat S, Hasse B, Zbinden R, Brugger S, Zinkernagel A. Assessing antibiotic tolerance of *Staphylococcus aureus* derived directly from patients by the Replica Plating Tolerance Isolation System- REPTIS. Antimicrob Agents Chemother. 2021 Oct 25:AAC0096721 DOI: 10.1128/AAC.00967-21
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 16. Husmann L, Huellner MW, Eberhard N, Ledergerber B, Kaelin MB, Anagnostopoulos A, Kudura K, Burger IA, Carlos-A. Mestres CA, Rancic Z, Hasse B, and the VASGRA Cohort*. PET/CT in Therapy Control of Mycotic Aortic Aneurysms. Sci Rep 2021 Mar 3;11(1):5065. doi: 10.1038/s41598-021-84658-z
 17. Maurer SM, Kursawe L, Rahm S, Prinz J, Zinkernagel AS; Moter A, Kuster SP, Zbinden R, Zingg PO and Achermann Y. Cutibacterium avidum resists surgical skin antisepsis in the groin - a potential risk factor for periprosthetic joint infection: a quality control study. Antimicrob Resist Infect Control (2021) 10:27
 18. Frey PM, Baer J, Bergadà Pijuan J, Lawless C, Bühler PK, Kouyos RD, Lemon KP, Zinkernagel AS, Brugger SD. Quantifying variation in bacterial reproductive fitness: a high-throughput method. mSystems 2021; 6(1):e01323-20
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