

OUTPUT VASGRA COHORT

Original articles

1. Schweizer TA, Mairpady Shambat S, Dengler Haunreiter V, Mestres CA, Weber A, Maisano F, Zinkernagel AS*, Hasse B*. Prospective clinical and in vitro findings show coating of polyester vascular graft material as a risk factor for intracavitary thoracic vascular graft infection. *Emerg Inf Dis*, in press
2. Husmann L, Huellner MW, Ledergerber B, Eberhard N, Kälin MB, Anagnostopoulos A, Kedura K, Burger IA, Mestres CA, Rancic Z, Hasse B and the Vasgra Cohort. Diagnostic Accuracy of 18F-FDG-PET/CT and contrast-enhanced CT in Patients with Suspected Infected Arterial Aneurysms. *Eur J Vasc Endovasc Surg*. 2020 Jun;59(6):972-981
3. Anagnostopoulos A, Ledergerber B, Kuster SP, Scherrer AU, Naef B, Greiner MA, Rancic Z, Kobe A, Bettex D, Hasse B, and the VASGRA Cohort Study. Inadequate perioperative prophylaxis and postsurgical complications after graft implantation are important risk factors for subsequent vascular graft infections – prospective results from the VASGRA Cohort Study *Clin Infect Dis*. 2019 Aug 1;69(4):621-630
4. Husmann L, Huellner MW, Ledergerber B, Anagnostopoulos A, Stolzmann P, Sah BR, Burger IA, Rancic Z, Hasse B, and the VASGRA Cohort. Comparing Diagnostic Accuracy of 18F-FDG-PET/CT, Contrast Enhanced CT and Combined Imaging in Patients with Suspected Vascular Graft Infections. *Eur J Nucl Med Mol Imaging*. 2018 Nov 13. doi:10.1007
5. Husmann L, Ledergerber B, Anagnostopoulos A, Stolzmann P, Sah BR, Burger IA, Pop R, Weber A, Mayer D, Rancic Z, Hasse B, the VASGRA Cohort Study. The role of FDG PET/CT in therapy control of aortic graft infection. *Eur J Nucl Med Mol Imaging*. 2018 Oct;45(11):1987-1997
6. Ajdler-Schaeffler E, Scherrer AU, Keller PM, Anagnostopoulos A, Hofmann M, Rancic Z, Zinkernagel AS, Bloemberg GV, Hasse B, the VASGRA Cohort. Increased pathogen identification in vascular graft infections by the combined use of tissue cultures and 16S rRNA gene polymerase chain reaction. *Front Med* 2018 Jun 4;5:169. doi: 10.3389/fmed.2018.00169. eCollection 2018.
7. *van Ingen J, *Kohl TA, *Kranzer K, Hasse B, Keller PM, Szafrńska AK, Hillemann D, Chand M, Schreiber PW, Sommerstein R, Berger Ch, Genoni M, Rueegg Ch, Troillet N, Widmer AF, Becker SL, Herrmann M, Eckmanns T, Haller S, Hoeller Ch, Debast SB, Wolfhagen MJ, Hopman J, Kluytmans J, Langelaar M, Notermans DW, ten Oever J; van den Barselaar P; Vonk AB; Vos MC; Ahmed N; Brown T; Crook D; Lamagni T; Phin N, Smith G; Zambon M; Serr A; Goetting T, Ebner W, Thuermer A; Utpatel Ch; Sproeer C; Bunk B; Nuebel; *Bloemberg GV; *Boettger EC; *Niemann S; *Wagner D; *Sax H. Multi-country outbreak of *Mycobacterium chimaera* disease in cardiac surgery. *Lancet Infect Dis*. 2017 Jul 12. pii: S1473-3099(17)30324-9
8. Zweifel SA; Mihic-Probst D, Curcio CA, Barthelmes D, Thielken A, Keller PM, *Hasse B, *Boeni C. Clinical and histopathologic ocular findings in disseminated *Mycobacterium chimaera* infection after cardiothoracic surgery. *Ophthalmology*. 2017 Feb;124(2):178-188. doi: 10.1016/j.ophtha.2016.09.032.
9. Schreiber PW, Kuster SP, Hasse B, Bayard C, Rüegg Ch, Kohler P, Keller PM, Bloemberg GV, Maisano F, Bettex D, Halbe M, Sommerstein R, Sax H. Reemergence of *Mycobacterium*

chimaera in heater-cooler units despite an intensified cleaning and disinfection protocol. *Emerg Infect Dis.* 2016 Oct;22(10):1830-3

10. Scherrer AU, Bloemberg GV, Zbinden R, Zinkernagel AS, Fuchs C, Frauenfelder S, Rancic Z, *Mayer D, *Hasse B, the VASGRA cohort. Prosthetic vascular graft infections: bacterial cultures from negative pressure wound therapy foams do not improve diagnostics. *J Clin Microbiol.* 2016 Aug;54(8):2190-3.
11. Kohler P, Kuster SP, Bloemberg G, Schulthess B, Frank M, Tanner F, Rössle M, Böni Ch, Falk V, Wilhelm MJ, Sommerstein R, Achermann Y, tenOever J, Debast S, Wolfhagen M, Brandon Bravo Bruinsma GJ, Vos M, Bogers A, Serr A, Beyersdorf F, Sax H, Böttger EC, Weber R, Wagner D, van Ingen J, Hasse B. Health-care associated prosthetic heart valve, aortic vascular graft, and disseminated *Mycobacterium chimaera* infections subsequent to open heart surgery. *Eur Heart J.* 2015 Oct 21;36(40):2745-53.
12. Husmann L, Sah BR, Scherrer A, Burger IA, Stolzmann P, Weber R, Rancic Z, Mayer D, Hasse B, the Vasgra cohort. 18F-FDG-PET/CT for therapy control in vascular graft infections: a first feasibility study. *J Nucl Med.* 2015 Jul;56(7):1024-9
13. Sax H; Bloemberg G; Hasse B, Sommerstein R, Kohler P, Achermann Y, Rössle M, Falk V, Kuster SP, Böttger EC, Weber R. Prolonged outbreak of *Mycobacterium chimaera* Infection after open chest heart surgery. *Clin Infect Dis.* 2015 Jul 1;61(1):67-75.
14. Sah BR, Husmann L, Mayer D, Scherrer A, Rancic Z, Puipe G, Weber R, Hasse B, the VASGRA cohort. Diagnostic performance of 18F-FDG PET/CT in vascular graft infections. *Eur J Vasc Endovasc Surg* 2015; 49(4):455-64
15. Achermann Y, Rössle M, Hoffmann M, Deggim V, Kuster S, Zimmermann D, Bloemberg G, Hombach M, Hasse B. Prosthetic valve endocarditis and blood stream infection due to *Mycobacterium chimaera*. *J Clin Microbiol* 2013. 51(6):1769-73.
16. Mayer D, Hasse B, Koelliker J, Enzler M, Veith FJ, Rancic Z, Lachat M. Vascular graft and artery preserving treatment with negative wound pressure therapy in Szilagyi grade III infections: long term results justify a paradigm shift. *Ann Surg* 2011. 254: 754-59

Case reports

1. Lauk O, Fulchini R, Hasse B*, Schmitt-Opitz I*. Aorto-bronchial fistula and Listeria endograft infection after repeated T/EVAR- a rare combination" *BMJ case reports, BMJ Case Rep.* 2020 Mar 4;13(3). pii: e229924. doi: 10.1136/bcr-2019-229924.
2. Schretzenmayr L, Hasse B, Mestres CA, Gutschow CA, Rost B, Brunner J, Brack T. Chronischer Graftinfekt mit aorto-ösophagealer Fistel nach operativer Versorgung einer Aortendissektion: infektiöses Chamäleon. *Schweizerisches Medizin-Forum* 2020;20(17-18):296-299
3. Plate A, Kohl TA, Keller PM, Majer S, Fulchini R, Strahm C, Medugno C, Rancic Z, Husmann L, Sax H, Niemann S, Hasse B. Abdominal aortic graft infection with *Granulicatella adiacens* and *Mycobacterium chimaera* unrelated to the global cardiac surgery outbreak. *Emerg Infect Dis.* 2018 Sep 17;24(9). doi: 10.3201/eid2409.180247

Reviews

1. Hasse B, Hannan M, Keller PM, Maurer FP, Sommerstein R, Mertz D, Wagner D, Fernández-Hidalgo N, Nomura J, Manfrin V, Bettex D, Conte AH, Durante-Mangoni E, Hing-Cheung Tang T, Stuart RL, Lundgren J, Gordon S, Jarashow MC, Schreiber PW, Niemann S, Kohl TA, Daley C, Stewardson AJ, Whitener CJ, Perkins K, Plachouras D, Lamagni T, Chand M, Freiburger T, Zweifel S, Sander P, Schulthess B, Scriven J, Sax H, van Ingen J, Mestres CA, Diekema D, Brown-Elliott BA, Wallace RJ Jr, Baddour LM, Miro JM*, Hoen B* (2019). International Society of Cardiovascular Infectious Diseases Guidelines for the Diagnosis, Treatment and Prevention of Disseminated Mycobacterium chimaera Infection Following Cardiac Surgery with Cardiopulmonary Bypass. J Hosp Infect. 2020 Feb;104(2):214-235.
2. Hasse B, Husmann L, Zinkernagel A, Weber R, Lachat M, Mayer D. Vascular graft infections. Swiss Med Wkly 2013. 143:w13754

Doctoral work

1. Beat Friedrich. Early versus late-onset vascular graft infections - microbiological spectrum and implications on antimicrobial therapy (ongoing). Dissertation an der Universität Zürich
Betreuung: PD Dr. Barbara Hasse. Leitung: Prof. Dr. Rainer Weber
2. Fabienne Mayer. Validation of the Management of Aortic Graft Infection Collaboration criteria for the diagnosis of vascular graft infection: results from the prospective Vascular graft cohort study. Universität Zürich (ongoing).
3. Jeannette Kölliker. Bei Szilagyi Grad III Infekten können vaskuläre Grafts durch eine VAC-Therapie erhalten werden: Langzeitresultate Universitätsspital Zürich 2002-2009. Universität Zürich 2011.

Master theses

1. Stefan Leung. Emergence of rifampin resistance in Staphylococci among patients with vascular graft infections treated with multi-staged negative pressure wound therapy and immediate or delayed rifampin treatment. Universität Zürich (ongoing).
2. Bettina Naef. Risikofaktoren für die Entwicklung eines Gefäßprothesenassoziierten Infektes Universität Zürich 2018.
3. Sandra Frauenfelder. Predictors of treatment response and outcome among patients with prosthetic vascular graft infections. Universität Zürich 2015.
4. Claudio Fuchs. Klinische Relevanz von aus Schwämmen zur topischen Unterdruckwundbehandlung isolierten Bakterien bei Gefäßprotheseninfektionen. Universität Zürich 2014.

Posters

1. Beat Friedrich, Bruno Ledergerber, Alexia Anagnostopoulos, Nadia Eberhard, Reinhard Zbinden, Zoran Rancic, Reinhard Kopp, Carlos Mestres, Barbara Hasse, and the VASGRA Cohort Study. Early versus late onset vascular graft infections: microbiological spectrum and implications on antimicrobial therapy. Annual Meeting of the Swiss Society of Infectious Diseases, Lausanne Switzerland, September 18-19, 2019
2. Lars Husmann, Martin W. Huellner, Nadia Eberhard, Bruno Ledergerber, Alexia Anagnostopoulos, Carlos Mestres, Ken Kedura, Irene A. Burger, Zoran Rancic, Barbara Hasse, and the VASGRA Cohort. Usefulness of 18F-FDG-PET/CT in therapy control of Inflammatory and Mycotic Aneurysms. ISCVID Lausanne (Switzerland), June 2-4, 2019

3. Lars Husmann, Martin W. Huellner, Bruno Ledergerber, Nadia Eberhard, Marisa B. Kaelin, Alexia Anagnostopoulos, Ken Kedura, Irene A. Burger, Carlos-A. Mestres, Zoran Rancic, Barbara Hasse, and the Vasgra Cohort. Usefulness of 18F-FDG-PET/CT and contrast-enhanced CT for Diagnosis of Mycotic Aneurysms. ISCVI D Lausanne (Switzerland), June 2-4, 2019
4. Beat Friedrich, Bruno Ledergerber, Alexia Anagnostopoulos, Nadia Eberhard, Reinhard Zbinden, Zoran Rancic, Reinhard Kopp, Carlos Mestres, Barbara Hasse, and the VASGRA Cohort Study. Early versus late onset vascular graft infections: microbiological spectrum and implications on antimicrobial therapy. ISCVI D Lausanne (Switzerland), June 2-4, 2019
5. Carlotta Fabbri, Peter M. Keller, Anna Rominski, Peter W. Schreiber, Hugo Sax, Carlos Mestres, Rami Sommerstein, Stefan Erb, Andreas Widmer, Nina Khanna, Adrian Egli, Annette Moter, Peter Sander, Leo Eber, Barbara Hasse. Biofilm formation of Mycobacterium chimaera on polymers and on heart valves of infected patients: possible implications on treatment. ISCVI D Lausanne (Switzerland), June 2-4, 2019
6. Leung YS, Ledergerber B, Eberhard N, Rancic Z, Anagnostopoulos A, Zinkernagel A, Hasse B, the VASGRA Cohort. Open wounds and ongoing rifampin combination therapy are strongly associated with the development of rifampin resistance among staphylococcal vascular graft infections. ECCMID Amsterdam April 11, 2019
7. Mayer FV, Ledergerber B, Rancic Z, Husmann L, Marques Maggio E, Anagnostopoulos A, Mayer DO, Hasse B and the VASGRA Cohort Study. Validation of the Management of Aortic Graft Infection Collaboration criteria for the diagnosis of vascular graft infection: results from the prospective Vascular graft cohort study. Annual Meeting of the Swiss Society of Infectious Diseases, Interlaken Switzerland, September 13-14, 2018. (Posterflash).
8. Anagnostopoulos A, Ledergerber B, Kuster SP, Scherrer AU, Näf B, Greiner M, Rancic Z, Bettex D, Lachat M, Hasse B, and the VASGRA Cohort Study. Postsurgical complications after graft implantation are important risk factors for subsequent vascular graft infections – prospective results from the VASGRA Cohort Study. Annual Meeting of the Swiss Society of Infectious Diseases, Interlaken Switzerland, September 13-14, 2018.
9. Anagnostopoulos A, Ledergerber B, Kuster SP, Scherrer AU, Näf B, Greiner M, Rancic Z, Bettex D, Lachat M, Hasse B, and the VASGRA Cohort Study. Risk factors for prosthetic vascular graft infections. Infectious Diseases of America Week. San Diego (USA), October 2017

Scientific exposures

1. Hasse B. Overview on the current international guidelines for the diagnosis, treatment, and prevention of disseminated Mycobacterium chimaera infection following cardiac surgery with cardiopulmonary bypass. Venice Italy, January 28, 2020.
2. Rancic Z. NPWT for vascular graft infections: long-term results. Veith Symposium New York (USA) November 19-23, 2019.
3. Rancic Z. In for a dime, in for a dollar, Use of PET/CT in vascular graft infections. Veith Symposium New York (USA) November 19-23, 2019.
4. Husmann L. Usefulness of 18F-FDG-PET/CT and contrast-enhanced CT for Diagnosis of Mycotic Aneurysms. ESVS Annual Meeting, Hamburg Germany. September 24-27, 2019.

5. Husmann L. Usefulness of 18F-FDG-PET/CT in therapy control of Inflammatory and Mycotic Aneurysms. ESVS Annual Meeting, Hamburg Germany. September 24-27, 2019.
6. M. van Hemelrijck. Infection of root and ascending aortic grafts still a highly lethal condition: the Vasgra Cohort. ISCVI D Lausanne (Switzerland), June 2-4, 2019
7. Schweizer T. Comparing the thoracic aortic graft infection risk based on two different types of vascular grafts: evidence from an in-vitro study. ISCVI D Lausanne (Switzerland), June 2-4, 2019
8. Hasse B. Mycobacterium chimaera Guidelines. ISCVI D Lausanne (Switzerland), June 2-4, 2019
9. Hasse B. The nightmare of Mycobacterium chimaera. 29th ECCMID Amsterdam. (The Netherlands) April 13, 2019.
10. Husmann L. Comparing the diagnostic accuracy of 18F-FDG-PET/CT, contrast-enhanced CT and combined imaging in patients with suspected vascular graft infections. European Congress of Radiology, Vienna. February 17, 2019
11. Schweizer T. Comparing the thoracic aortic graft infection risk based on two different types of vascular grafts: evidence from an in-vitro study. Club de Pathologie of the Swiss Society of Infectious Diseases, Berne Switzerland. February 06, 2019
12. Rancic Z. Paradigm shift with VAC in case of vascular graft infection. Veith Symposium New York (USA) November 13-17, 2018.
13. Hasse B. Cardiovascular infections: a multidisciplinary treatment approach. Freiburg im Breisgau (Germany). September 10th, 2018.
14. Rancic Z. Good Early Results of Negative Pressure Wound Non-Excisional Treatment for Prosthetic Graft Infection Are Durable: It Is a Game Changer. SVS 2018: Vascular Annual Meeting, Boston (USA). June 20, 2018.
15. Rancic Z. Risk factors for prosthetic vascular graft infections. Jahreskongress der Schweizerischen Gesellschaft für Chirurgie, Basel (Switzerland). May 24, 2018.
16. Hasse B. After an outbreak - *Mycobacterium chimaera*: under control or under water? 28th ECCMID, Madrid (Spain). April 21, 2018
17. Hasse B. Bruno Ledergerber Farewell Symposium. Non-HIV Cohorts: The Vascular Graft Cohort Study (VASGRA). Zurich (Switzerland). November 30, 2017.
18. Hasse B. Vascular prosthetic graft infections. Dutch Association of Clinical Microbiologists (NVMM) and the Dutch Association of Infectious Disease specialists (VIZ) and the Belgian Association of Infectious Diseases and Clinical Microbiology (BVIKM). De Ruwenberg – Den Bosch (the Netherlands), November 16-17, 2017
19. Hasse B. Epidemiología, diagnóstico y tratamiento de las infecciones por *Mycobacterium chimaera*. SEICAV, Barcelona (Spain) September 29, 2017

20. Anagnostopoulos A. ¹⁸F FDG PET/CT for therapy control in prosthetic vascular graft infection shows a longlasting effect. Joint annual meeting 2017: SSInf, SSHH, SSTMP, SSTTM. Basel (Switzerland). September 1, 2017
21. Hasse B. A global perspective on cases diagnosed and treated for *M. chimeria* infection associated with heater coolers, ISCVID, Dublin (Ireland) June 22-24, 2017.
22. Hasse B. Vascular graft infection: a multidisciplinary treatment approach. ISCVID Dublin (Ireland), June 22-24, 2017
23. Hasse B. Clinical management of Mycobacterium chimaera infections, 27 ECCMID Vienna. (Austria) April 25th 2017.
24. Hasse B. The multidisciplinary management of prosthetic vascular graft infections: The Zurich Experience. Update on Management of Cardiovascular Infections Symposium. Barcelona (Spain) April 7, 2017
25. Hasse B. Clinical management of Mycobacterium chimaera infections, Annual ID Symposium Lucerne (Switzerland) March 23, 2017
26. Rancic Z, Mayer D, Ledergerber B, Anagnostopoulos A, Lachat M, Hasse B. Good Early Results of negative pressure wound non-excisional treatment for prosthetic graft infection are durable. It is a game changer. Techniques and long-term results. Veith Symposium New York (USA) November 18, 2016.
27. Mayer D. VAC – keine Antibiotika – Minimal invasiv: ist das Alles? Dreiländertagung der Schweizerischen, Deutschen und Österreichischen Gesellschaften für Gefässchirurgie. Bern (Switzerland), October 5-8, 2016
28. Hasse B. Bacterial growth in the heater cooler unit – relevance for patients and perfusionists. EATCS, Barcelona (Spain), September 29, 2016
29. Hasse B. Prosthetic vascular graft infections. Joint annual meeting 2016: SSInf, SSHH, SSTMP, SSTTM, Montreux (Switzerland), September 2016
30. Hasse B. Nontuberculous Mycobacterium infections in two patients with cardiopulmonary bypass surgery: outbreak or coincidence? ASM Microbe, Boston (USA), June 2016.
31. Hasse B. Management of endovascular graft infections. 26th ECCMID, Amsterdam (the Netherlands), April 2016
32. Mayer D. Prosthetic vascular graft infections: cultures from NPWT foams are of no value in decision making. 16. Unionstagung Gefässchirurgie, Bern (Switzerland), October 2015
33. Mayer D. Surgical treatment of vascular graft infections. 16. Unionstagung Gefässchirurgie, Bern (Switzerland), October 2015
34. Hasse B. Medical treatment of vascular graft infections. 16. Unionstagung Gefässchirurgie, Bern (Switzerland), October 2015
35. Hasse B. Health-care associated prosthetic heart valve, aortic vascular graft and disseminated Mycobacterium chimaera infections subsequent to open-heart surgery. Joint annual meeting 2015: SSInf, SSHH, SSTMP, SSTTM, Interlaken (Switzerland), September 2015

36. Sah BR, Husmann L. 18F-FDG-PET/CT for therapy control in vascular graft infections: a first feasibility study. Jahreskongress Nuklearmedizin, Basel (Switzerland), 2015
37. Husmann L. Diagnostic performance of 18F-FDG PET/CT in vascular graft infections. ESVS Stockholm (Sweden) September 2014
38. Hasse B, Husmann L, Bloemberg G, Mayer D. Die Gefäßprotheseninfektion - eine interdisziplinäre Herausforderung, Vasgra Symposium Zürich (Switzerland), September 2014

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