

Publikationen Jan Buer

- VON BARGEN, L., PATANGIA, D., VON OSTAU, N., BUER, J., HESS, J. & KEHRMANN, J. 2026. Microbial community structure and source contribution to the early neovaginal microbiota following penile inversion vaginoplasty. *Front Cell Infect Microbiol*, 16, 1816814.
- PHAN, J., CANSIZ, F., WESTENDORF, A., BUER, J. & TASDOGAN, A. 2026. The role of retrotransposons in hematopoiesis and cancer. *Trends Cell Biol*, 36, 429–439.
- SCHARMANN, U., KIRCHHOFF, L., BUER, J., SCHULER, F., SERR, A., ROSSLER, S., HELD, J., SZUMLANSKI, T., STEINMANN, J. & RATH, P. M. 2025. Evaluation of the Loop-Mediated Isothermal Amplification Assay (LAMP) Eazyplex((R))Pneumocystis jirovecii. *J Fungi (Basel)*, 11.
- MESSIHA, D., LANGE, E., TRATNIK, A., A, M. W., RINKE, M., LENZ, S., HENDGEN-COTTA, U. B., BUER, J., RASSAF, T. & RAMMOS, C. 2025. The influence of acute and chronic coronary syndrome on the gut microbiome and downstream microbiome-derived metabolites-Microbiome in acute myocardial infarction-MIAMI-Trial. *Basic Res Cardiol*, 120, 913–924.
- MEKES-ADAMCZYK, A., GAUSMANN, N., OZNUR, O., PFUHLMANN, K., DZIOBAKA, J., BUER, J., LANGHORST, J. & WESTENDORF, A. M. 2025. Lifestyle Intervention Modulates the CD4+ T Cell Profile in the Blood of Crohn's Disease Patients. *Inflamm Bowel Dis*, 31, 200–209.
- MEKES-ADAMCZYK, A., GAUSMANN, N., OZNUR, O., PFUHLMANN, K., DZIOBAKA, J., BUER, J., LANGHORST, J. & WESTENDORF, A. M. 2025. Lifestyle Intervention Modulates the CD4+ T Cell Profile in the Blood of Crohn's Disease Patients. *Inflamm Bowel Dis*, 31, 200–209.
- KUNG, A. J., DYKUN, I., TOTZECK, M., MINCU, R., MICHEL, L., KILL, C., WITZKE, O., BUER, J., RASSAF, T. & MAHABADI, A. A. 2025. Epicardial adipose tissue in patients with and without COVID-19 infection. *Am Heart J Plus*, 54, 100548.
- KEHRMANN, J., DOSTMOHAMMADI, A., STUMPF, A. L., BEST, L., CONSTEN, L., SIEVERT, H., MAISCHACK, F., SAMMET, S., ALBAYRAK-RENA, S., DOERR, A. K., BOHLEN, K., VON VELSEN, O., KRAISELBURD, I., KARSTEN, C. B., FARAHPOUR, F., MEYER, F., ESSER, S. & BUER, J. 2025. Gut microbiota differences linked to weight gain and ART in people living with HIV are enterotype specific and minor compared to the large differences linked to sexual behavior. *Front Cell Infect Microbiol*, 15, 1568352.
- HOSE, M., NINNEMANN, A., ABERGER, H., SCHUMACHER, F., NASER, E., PURKART, L., KORBMACHER, F., MARTINS NASCENTES MELO, L., BECKMANN, N., BLIETSCHAU, V., FALKENSTEIN, J., KLEUSER, B., TASDOGAN, A., GULBINS, E., CARPINTEIRO, A., KLOPFLEISCH, R., BUER, J., WESTENDORF, A. M., MATUSCHEWSKI, K. & HANSEN, W. 2025. Amitriptyline inhibits Plasmodium development in infected red blood cells by modulating sphingolipid metabolism and glucose uptake. *Biomed Pharmacother*, 189, 118331.
- HOSE, M., BLIETSCHAU, V., SCHUMACHER, F., NINNEMANN, A., NASER, E., FALKENSTEIN, J., CARPINTEIRO, A., KLEUSER, B., BUER, J., WESTENDORF, A. M., BINGEL, U., MULLER, D. & HANSEN, W. 2025. Influence of amitriptyline therapy on T cell phenotype in chronic pain patients. *Biomed Pharmacother*, 191, 118529.

- FALKENSTEIN, J., NINNEMANN, A., HOSE, M., ELWY, A., LANG, K. S., MATUSCHEWSKI, K., BUER, J., WESTENDORF, A. M. & HANSEN, W. 2025. Red pulp macrophages clear parasites, while marginal metallophilic and marginal zone macrophages support CD4(+) T cell activation during Plasmodium yoelii infection. *Front Immunol*, 16, 1607201.
- VOGEL, L. H., KAMPF, J., DYKUN, I., MAHMOUD, I., RATH, P. M., BUER, J., RASSAF, T. & MAHABADI, A. A. 2024. Artificial intelligence and logistic regression vs. the modified Duke score in the detection of infective endocarditis: a comparison within the PRO-ENDOCARDITIS study. *Journal of Medical Artificial Intelligence*, 7, 24–24.
- STEINBACH, P., PASTILLE, E., KAUMANN, L., ADAMCZYK, A., SUTTER, K., HANSEN, W., DITTMER, U., BUER, J., WESTENDORF, A. M. & KNUSCHKE, T. 2024. Influenza virus infection enhances tumour-specific CD8+ T-cell immunity, facilitating tumour control. *PLoS Pathog*, 20, e1011982.
- LECHEL, A., ANDE, S., JU, Z., PLENTZ, R. R., SCHAETZLEIN, S., RUDOLPH, C., WILKENS, L., WIEMANN, S. U., SARETZKI, G., MALEK, N. P., MANN, M. P., BUER, J. & RUDOLPH, K. L. 2024. Author Correction: The cellular level of telomere dysfunction determines induction of senescence or apoptosis in vivo. *EMBO Rep*, 25, 3738.
- KIRCHHOFF, L., ARWEILER-HARBECK, D., MEYER, M., BUER, J., LANG, S., STEINMANN, J., BERTRAM, R., DEUSS, E. & HOING, B. 2024. Bacterial biofilm formation on headpieces of Cochlear implants. *Eur Arch Otorhinolaryngol*, 281, 6261–6266.
- KEHRMANN, J., STUMPF, A. L., DRAGAQUINA, A. & BUER, J. 2024. Improved detection of mycobacteria in CF and tissue samples grown in mycobacteria growth indicator tube incubated at 30 degrees C compared to conventional growth conditions of liquid and solid media. *J Clin Microbiol*, 62, e0068324.
- HUANG, K. D., AMEND, L., GALVEZ, E. J. C., LESKER, T. R., DE OLIVEIRA, R., BIELECKA, A., BLANCO-MIGUEZ, A., VALLES-COLOMER, M., RUF, I., PASOLLI, E., BUER, J., SEGATA, N., ESSER, S., STROWIG, T. & KEHRMANN, J. 2024. Establishment of a non-Westernized gut microbiota in men who have sex with men is associated with sexual practices. *Cell Rep Med*, 5, 101426.
- DYCKHOFF-SHEN, S., MASOURIS, I., ISLAM, H., HAMMERSCHMIDT, S., ANGELE, B., MARATHE, V., BUER, J., VOLK, S., PFISTER, H. W., KLEIN, M., KOEDEL, U. & KIRSCHNING, C. J. 2024. Combining antibiotic with anti-TLR2/TLR13 therapy prevents brain pathology in pneumococcal meningitis. *JCI Insight*, 9.
- BREHMER, A., SAUER, C. M., SALAZAR RODRIGUEZ, J., HERRMANN, K., KIM, M., KEYL, J., BAHNSEN, F. H., FRANK, B., KOHRMANN, M., RASSAF, T., MAHABADI, A. A., HADASCHIK, B., DARR, C., HERRMANN, K., TAN, S., BUER, J., BRENNER, T., REINHARDT, H. C., NENSA, F., GERTZ, M., EGGER, J. & KLEESIEK, J. 2024. Establishing Medical Intelligence-Leveraging Fast Healthcare Interoperability Resources to Improve Clinical Management: Retrospective Cohort and Clinical Implementation Study. *J Med Internet Res*, 26, e55148.
- BELTSIOS, E., ZUBAREVICH, A., RUEMKE, S., RUBALSKII, E., OSSWALD, A., ARJOMANDI RAD, A., HEIDENAU, F., BUER, J., HANKE, J., SCHMITTO, J., POPOV, A. F., KUEHN, C., SCHMACK, B., RUHPARWAR, A. & WEYMANN, A. 2024. Antibacterial copper-filled TiO₂ coating of cardiovascular implants to prevent infective endocarditis-A pilot study. *Artif Organs*, 48, 356–364.

- VERHASSELT, H. L., RAMAKRISHNAN, E., SCHLAG, M., MARCHESI, J. R., BUER, J., KLEINSCHNITZ, C., HAGENACKER, T. & TOTZECK, A. 2023. Fungal Gut Microbiome in Myasthenia Gravis: A Sub-Analysis of the MYBIOM Study. *J Fungi (Basel)*, 9.
- SOKOLOVA, V., LOZA, K., EBEL, J. F., BUER, J., WESTENDORF, A. M. & EPPLE, M. 2023. Barium sulphate microparticles are taken up by three different cell types: HeLa, THP-1, and hMSC. *Acta Biomater*, 164, 577–587.
- MARDIKO, A. A., BUER, J., KOSTER, A. M., KABA, H. E. J., MATTNER, F., ZWEIGNER, J., MUTTERS, N. T., VON MALTZAHN, N., LEISTNER, R., ECKMANN, T., BRANDT, C. & SCHEITHAUER, S. 2023. Infection prevention and control between legal requirements and German Society for Hygiene and Microbiology expert assessments: a cross-sectional study in September–November 2022. *J Hosp Infect*, 137, 35–43.
- MAHABADI, A. A., MINCU, R., DYKUN, I., MICHEL, L., KUNG, A., WITZKE, O., KILL, C., BUER, J., RASSAF, T. & TOTZECK, M. 2023. Frequency and prognosis of CVD and myocardial injury in patients presenting with suspected COVID-19 - The CoV-COR registry. *Int J Cardiol Heart Vasc*, 45, 101184.
- MADEL, R. J., BORGER, V., DITTRICH, R., BREMER, M., TERTEL, T., PHUONG, N. N. T., BABA, H. A., KORDELAS, L., STAUBACH, S., STEIN, F., HABERKANT, P., HACKL, M., GRILLARI, R., GRILLARI, J., BUER, J., HORN, P. A., WESTENDORF, A. M., BRANDAU, S., KIRSCHNING, C. J. & GIEBEL, B. 2023. Independent human mesenchymal stromal cell-derived extracellular vesicle preparations differentially attenuate symptoms in an advanced murine graft-versus-host disease model. *Cytotherapy*, 25, 821–836.
- KEHRMANN, J., KOCH, F., ZUMDICK, S., HOWNER, A., BEST, L., MASSHOFER, L., SCHARFENBERG, S., ZESCHNIGK, M., BECKER, J. C., SCHADENDORF, D., BUER, J. & ROESCH, A. 2023. Reduced Staphylococcus Abundance Characterizes the Lesional Microbiome of Actinic Keratosis Patients after Field-Directed Therapies. *Microbiol Spectr*, 11, e0440122.
- HAI-YEHIA, E., KORSTE, S., JOCHEM, R., LUSHA, A., ROTH, A., DIETZEL, N., NIROOMAND, J., STOCK, P., WESTENDORF, A. M., BUER, J., HENDGEN-COTTA, U. B., RASSAF, T. & TOTZECK, M. 2023. CD47 blockade enhances phagocytosis of cardiac cell debris by neutrophils. *Int J Cardiol Heart Vasc*, 48, 101269.
- BUYS, W., BICK, A., MADEL, R. J., WESTENDORF, A. M., BUER, J., HERBSTREIT, F., KIRSCHNING, C. J. & PETERS, J. 2023. Substantial heterogeneity of inflammatory cytokine production and its inhibition by a triple cocktail of toll-like receptor blockers in early sepsis. *Front Immunol*, 14, 1277033.
- ABBERGER, H., HOSE, M., NINNEMANN, A., MENNE, C., EILBRECHT, M., LANG, K. S., MATUSCHEWSKI, K., GEFFERS, R., HERZ, J., BUER, J., WESTENDORF, A. M. & HANSEN, W. 2023. Neuropilin-1 identifies a subset of highly activated CD8+ T cells during parasitic and viral infections. *PLoS Pathog*, 19, e1011837.
- ZENG, N., CAPELLE, C. M., BARON, A., KOBAYASHI, T., CIRE, S., TSLAF, V., LEONARD, C., COOWAR, D., KOSEKI, H., WESTENDORF, A. M., BUER, J., BRENNER, D., KRUGER, R., BALLING, R., OLLERT, M. & HEFENG, F. Q. 2022. DJ-1 depletion prevents immunosuppression in T-cell compartments. *EMBO Rep*, 23, e53302.
- WILK, C., EFFENBERG, L., ABBERGER, H., STEENPASS, L., HANSEN, W., ZESCHNIGK, M., KIRSCHNING, C., BUER, J. & KEHRMANN, J. 2022. CRISPR/Cas9-mediated demethylation of FOXP3-TSDR toward Treg-characteristic programming of Jurkat T cells. *Cell Immunol*, 371, 104471.

- WENZEK, C., STEINBACH, P., WIRSDORFER, F., SUTTER, K., BOEHME, J. D., GEFFERS, R., KLOPFLEISCH, R., BRUDER, D., JENDROSSEK, V., BUER, J., WESTENDORF, A. M. & KNUSCHKE, T. 2022. CD47 restricts antiviral function of alveolar macrophages during influenza virus infection. *iScience*, 25, 105540.
- SCHILDHAUS, H. U., STEINDOR, M., KOLSCH, B., HEROLD, T., BUER, J. & KEHRMANN, J. 2022. GenoType CM Direct((R)) and VisionArray Myco((R)) for the Rapid Identification of Mycobacteria from Clinical Specimens. *J Clin Med*, 11.
- SCHARMANN, U., HERBSTREIT, F., STECKEL, N. K., DEDY, J., BUER, J., RATH, P. M. & VERHASSELT, H. L. 2022. Prevalence of COVID-19 Associated Mucormycosis in a German Tertiary Care Hospital. *J Fungi (Basel)*, 8.
- SANDERS, M. I., ALI, E., BUER, J., STEINMANN, J., RATH, P. M., VERHASSELT, H. L. & KIRCHHOFF, L. 2022. Antibacterial Activity of the Novel Drug Gepotidacin against *Stenotrophomonas maltophilia*-An In Vitro and In Vivo Study. *Antibiotics (Basel)*, 11.
- REINOLD, J., FARAHPOUR, F., SCHOERDING, A. K., FEHRING, C., DOLFF, S., KONIK, M., KORTH, J., VAN BAAL, L., BUER, J., WITZKE, O., WESTENDORF, A. M. & KEHRMANN, J. 2022. The Fungal Gut Microbiome Exhibits Reduced Diversity and Increased Relative Abundance of Ascomycota in Severe COVID-19 Illness and Distinct Interconnected Communities in SARS-CoV-2 Positive Patients. *Front Cell Infect Microbiol*, 12, 848650.
- PYLAEVA, E., KORSCHUNOW, G., SPYRA, I., BORDBARI, S., SIAKAEVA, E., OZEL, I., DOMNICH, M., SQUIRE, A., HASENBERG, A., THANGAVELU, K., HUSSAIN, T., GOETZ, M., LANG, K. S., GUNZER, M., HANSEN, W., BUER, J., BANKFALVI, A., LANG, S. & JABLONSKA, J. 2022. During early stages of cancer, neutrophils initiate anti-tumor immune responses in tumor-draining lymph nodes. *Cell Rep*, 40, 111171.
- PLOENES, T., POLLOK, A., JOCKEL, K. H., KAMPE, S., DARWICHE, K., TAUBE, C., BUER, J. & AIGNER, C. 2022. The pathological oral cavity as a preventable source of postoperative pneumonia in thoracic surgery: a prospective observational study. *J Thorac Dis*, 14, 822–831.
- KIRCHHOFF, L., DITTMER, S., FURNICA, D. T., BUER, J., STEINMANN, E., RATH, P. M. & STEINMANN, J. 2022. Inhibition of azole-resistant *Aspergillus fumigatus* biofilm at various formation stages by antifungal drugs, including olorofim. *J Antimicrob Chemother*, 77, 1645–1654.
- KIRCHHOFF, L., BRAUN, L. M., SCHMIDT, D., DITTMER, S., DEDY, J., HERBSTREIT, F., STAUF, R., STECKEL, N. K., BUER, J., RATH, P. M., STEINMANN, J. & VERHASSELT, H. L. 2022. COVID-19-associated pulmonary aspergillosis in ICU patients in a German reference centre: Phenotypic and molecular characterisation of *Aspergillus fumigatus* isolates. *Mycoses*, 65, 458–465.
- HOSE, M., GUNTHER, A., NASER, E., SCHUMACHER, F., SCHONBERGER, T., FALKENSTEIN, J., PAPADAMAKIS, A., KLEUSER, B., BECKER, K. A., GULBINS, E., HAIMOVITZ-FRIEDMAN, A., BUER, J., WESTENDORF, A. M. & HANSEN, W. 2022. Cell-intrinsic ceramides determine T cell function during melanoma progression. *Elife*, 11.
- GUNTHER, A., HOSE, M., ABBERGER, H., SCHUMACHER, F., VEITH, Y., KLEUSER, B., MATUSCHEWSKI, K., LANG, K. S., GULBINS, E., BUER, J., WESTENDORF, A. M. & HANSEN, W. 2022. The acid ceramidase/ceramide axis controls parasitemia in *Plasmodium yoelii*-infected mice by regulating erythropoiesis. *Elife*, 11.

- BICK, A., BUYS, W., ENGLER, A., MADEL, R., ATIA, M., FARO, F., WESTENDORF, A. M., LIMMER, A., BUER, J., HERBSTREIT, F., KIRSCHNING, C. J. & PETERS, J. 2022. Immune hyporeactivity to bacteria and multiple TLR-ligands, yet no response to checkpoint inhibition in patients just after meeting Sepsis-3 criteria. *PLoS One*, 17, e0273247.
- VERHASSELT, H. L., BUER, J., DEDY, J., ZIEGLER, R., STEINMANN, J., HERBSTREIT, F., BRENNER, T. & RATH, P. M. 2021. COVID-19 Co-infection with Legionella pneumophila in 2 Tertiary-Care Hospitals, Germany. *Emerg Infect Dis*, 27, 1535–1537.
- TOTZECK, A., RAMAKRISHNAN, E., SCHLAG, M., STOLTE, B., KIZINA, K., BOLZ, S., THIMM, A., STETTNER, M., MARCHESI, J. R., BUER, J., KLEINSCHNITZ, C., VERHASSELT, H. L. & HAGENACKER, T. 2021. Gut bacterial microbiota in patients with myasthenia gravis: results from the MYBIOM study. *Ther Adv Neurol Disord*, 14, 17562864211035657.
- STÄHR, K. D., A.; BUER, J.; LANG, S. 2021. Meso- und Hypopharynx - Entzündungen. In: GUNTINAS-LICHIUS, O. K., J.P.; LANG, S. (ed.) *Referenz HNO-Heilkunde* Stuttgart: Thieme.
- SCHARMANN, U., KIRCHHOFF, L., HAIN, A., BUER, J., KOLDEHOFF, M., STEINMANN, J. & RATH, P. M. 2021. Evaluation of Three Commercial PCR Assays for the Detection of Azole-Resistant *Aspergillus fumigatus* from Respiratory Samples of Immunocompromised Patients. *J Fungi (Basel)*, 7.
- REINOLD, J., FARAHPOUR, F., FEHRING, C., DOLFF, S., KONIK, M., KORTH, J., VAN BAAL, L., HOFFMANN, D., BUER, J., WITZKE, O., WESTENDORF, A. M. & KEHRMANN, J. 2021. A Pro-Inflammatory Gut Microbiome Characterizes SARS-CoV-2 Infected Patients and a Reduction in the Connectivity of an Anti-Inflammatory Bacterial Network Associates With Severe COVID-19. *Front Cell Infect Microbiol*, 11, 747816.
- PASTILLE, E., FASSNACHT, T., ADAMCZYK, A., NGO THI PHUONG, N., BUER, J. & WESTENDORF, A. M. 2021. Inhibition of TLR4 Signaling Impedes Tumor Growth in Colitis-Associated Colon Cancer. *Front Immunol*, 12, 669747.
- PALMIERI, V., EBEL, J. F., NGO THI PHUONG, N., KLOPFLEISCH, R., VU, V. P., ADAMCZYK, A., ZOLLER, J., RIEDEL, C., BUER, J., KREBS, P., HANSEN, W., PASTILLE, E. & WESTENDORF, A. M. 2021. Interleukin-33 signaling exacerbates experimental infectious colitis by enhancing gut permeability and inhibiting protective Th17 immunity. *Mucosal Immunol*, 14, 923–936.
- MAHABADI, A. A., MAHMOUD, I., DYKUN, I., TOTZECK, M., RATH, P. M., RUHPARWAR, A., BUER, J. & RASSAF, T. 2021. Diagnostic value of the modified Duke criteria in suspected infective endocarditis -The PRO-ENDOCARDITIS study. *Int J Infect Dis*, 104, 556–561.
- KNUSCHKE, T., KOLLEND, S., WENZKE, C., ZELINSKY, G., STEINBACH, P., DITTMER, U., BUER, J., EPPLE, M. & WESTENDORF, A. M. 2021. A Combination of Anti-PD-L1 Treatment and Therapeutic Vaccination Facilitates Improved Retroviral Clearance via Reactivation of Highly Exhausted T Cells. *mBio*, 12.
- HANSEN, W., LUPPUS, S., BARTHEL, R., CHANG, D. I., BROEMSTRUP, J., ZWARG, T., SHIBATA, J., WESTENDORF, A. M., BUER, J. & SCHERBAUM, N. 2021. Heroin-assisted treatment of heroin-addicted patients normalizes regulatory T cells but does not restore CD4(+) T cell proliferation. *Addict Biol*, 26, e12998.

- HANSEN, W., LUPPUS, S., BARTHEL, R., CHANG, D. I., BROEMSTRUP, J., ZWARG, T., SHIBATA, J., WESTENDORF, A. M., BUER, J. & SCHERBAUM, N. 2021. Heroin-assisted treatment of heroin-addicted patients normalizes regulatory T cells but does not restore CD4(+) T cell proliferation. *Addict Biol*, 26, e12998.
- DRÖGE, F. S., K.; DASER, A.; BUER, J.; DOMINAS, N. 2021. Mundhöhle - Infektionen. In: GUNTINAS-LICHIUS, O. K., J.P.; LANG, S. (ed.) *Referenz HNO-Heilkunde* Stuttgart: Thieme.
- CHAPOT, V., EFFENBERG, L., DOHMEN-RUETTEN, J., BUER, J. & KEHRMANN, J. 2021. Evaluation of the Accelerate Pheno System for Rapid Identification and Antimicrobial Susceptibility Testing of Positive Blood Culture Bottles Inoculated with Primary Sterile Specimens from Patients with Suspected Severe Infections. *J Clin Microbiol*, 59.
- BECKER, K. A., VERHAEGH, R., VERHASSELT, H. L., KEITSCH, S., SODDEMANN, M., WILKER, B., WILSON, G. C., BUER, J., AHMAD, S. A., EDWARDS, M. J. & GULBINS, E. 2021. Acid Ceramidase Rescues Cystic Fibrosis Mice from Pulmonary Infections. *Infect Immun*, 89.
- ARWEILER-HARBECK, D. B., J.; SAXE, J. 2021. Äußeres Ohr - Infektionen und Entzündungen. In: GUNTINAS-LICHIUS, O. K., J.P.; LANG, S. (ed.) *Referenz HNO-Heilkunde* Stuttgart: Thieme.
- ADAMCZYK, A., PASTILLE, E., KEHRMANN, J., VU, V. P., GEFFERS, R., WASMER, M. H., KASPER, S., SCHULER, M., LANGE, C. M., MUGGLI, B., RAU, T. T., KLEIN, D., HANSEN, W., KREBS, P., BUER, J. & WESTENDORF, A. M. 2021. GPR15 Facilitates Recruitment of Regulatory T Cells to Promote Colorectal Cancer. *Cancer Res*, 81, 2970–2982.
- ABBERGER, H., BARTHEL, R., BAHR, J., THIEL, J., LUPPUS, S., BUER, J., WESTENDORF, A. M. & HANSEN, W. 2021. Neuropilin-1 Is Expressed on Highly Activated CD4(+) Effector T Cells and Dysfunctional CD4(+) Conventional T Cells from Naive Mice. *J Immunol*, 207, 1288–1297.
- ZOLLER, J., EBEL, J. F., KHAIRNAR, V., SCHMITT, V., KLOPFLEISCH, R., MEINERS, J., SEIFFART, V., HANSEN, W., BUER, J., SINGER, B. B., LANG, K. S. & WESTENDORF, A. M. 2020. CEACAM1 regulates CD8(+) T cell immunity and protects from severe pathology during *Citrobacter rodentium* induced colitis. *Gut Microbes*, 11, 1790–1805.
- WESTMEIER, D., SIEMER, S., VALLET, C., STEINMANN, J., DOCTER, D., BUER, J., KNAUER, S. K. & STAUBER, R. H. 2020. Boosting nanotoxicity to combat multidrug-resistant bacteria in pathophysiological environments. *Nanoscale Adv*, 2, 5428–5440.
- SCHEFFEL, F., KNUSCHKE, T., OTTO, L., KOLLEND, S., SOKOLOVA, V., COSMOVICI, C., BUER, J., TIMM, J., EPPLE, M. & WESTENDORF, A. M. 2020. Effective Activation of Human Antigen-Presenting Cells and Cytotoxic CD8(+) T Cells by a Calcium Phosphate-Based Nanoparticle Vaccine Delivery System. *Vaccines (Basel)*, 8.
- SCHARMANN, U., VERHASSELT, H. L., KIRCHHOFF, L., BUER, J., RATH, P. M., STEINMANN, J. & ZIEGLER, K. 2020. Evaluation of two lateral flow assays in BAL fluids for the detection of invasive pulmonary aspergillosis: A retrospective two-centre study. *Mycoses*, 63, 1362–1367.
- SCHARMANN, U., KIRCHHOFF, L., SCHMIDT, D., BUER, J., STEINMANN, J. & RATH, P. M. 2020. Evaluation of a commercial Loop-mediated Isothermal Amplification (LAMP) assay for rapid detection of *Pneumocystis jirovecii*. *Mycoses*, 63, 1107–1114.

- SCHARMANN, U., KIRCHHOFF, L., CHAPOT, V. L. S., DZIOBAKA, J., VERHASSELT, H. L., STAUF, R., BUER, J., STEINMANN, J. & RATH, P. M. 2020. Comparison of four commercially available chromogenic media to identify *Candida albicans* and other medically relevant *Candida* species. *Mycoses*, 63, 823–831.
- PELZER, B. W., SEUFERT, R., KOLDEHOFF, M., LIEBREGTS, T., SCHMIDT, D., BUER, J., RATH, P. M. & STEINMANN, J. 2020. Performance of the AsperGenius(R) PCR assay for detecting azole resistant *Aspergillus fumigatus* in BAL fluids from allogeneic HSCT recipients: A prospective cohort study from Essen, West Germany. *Med Mycol*, 58, 268–271.
- MOELLEKEN, M., JOCKENHOFER, F., WIEGAND, C., BUER, J., BENSON, S. & DISSEMOND, J. 2020. Pilot study on the influence of cold atmospheric plasma on bacterial contamination and healing tendency of chronic wounds. *J Dtsch Dermatol Ges*, 18, 1094–1101.
- LIEDTKE, K., ALTER, C., GUNTHER, A., HOVELMEYER, N., KLOPFLEISCH, R., NAUMANN, R., WUNDERLICH, F. T., BUER, J., WESTENDORF, A. M. & HANSEN, W. 2020. Endogenous CD83 Expression in CD4(+) Conventional T Cells Controls Inflammatory Immune Responses. *J Immunol*, 204, 3217–3226.
- LANG, S., BRANDAU, S., MARCHESI, J. R., JABLONSKA, J., THURNHER, D., MATTHEIS, S., BUER, J. & HUSSAIN, T. 2020. [The microbiome in head and neck tumors-initial findings and outlook]. *HNO*, 68, 905–910.
- KIRCHHOFF, L., WEISNER, A. K., SCHREPPFER, M., HAIN, A., SCHARMANN, U., BUER, J., RATH, P. M. & STEINMANN, J. 2020. Phenotypical Characteristics of the Black Yeast *Exophiala dermatitidis* Are Affected by *Pseudomonas aeruginosa* in an Artificial Sputum Medium Mimicking Cystic Fibrosis-Like Conditions. *Front Microbiol*, 11, 471.
- KIRCHHOFF, L., DITTMER, S., WEISNER, A. K., BUER, J., RATH, P. M. & STEINMANN, J. 2020. Antibiofilm activity of antifungal drugs, including the novel drug olorofim, against *Lomentospora prolificans*. *J Antimicrob Chemother*, 75, 2133–2140.
- KIRCHHOFF, L., DITTMER, S., BUER, J., RATH, P. M. & STEINMANN, J. 2020. In vitro activity of olorofim (F901318) against fungi of the genus, *Scedosporium* and *Rasamsonia* as well as against *Lomentospora prolificans*, *Exophiala dermatitidis* and azole-resistant *Aspergillus fumigatus*. *Int J Antimicrob Agents*, 56, 106105.
- KIRCHHOFF, L., ARWEILER-HARBECK, D., ARNOLDS, J., HUSSAIN, T., HANSEN, S., BERTRAM, R., BUER, J., LANG, S., STEINMANN, J. & HOING, B. 2020. Imaging studies of bacterial biofilms on cochlear implants-Bioactive glass (BAG) inhibits mature biofilm. *PLoS One*, 15, e0229198.
- KEHRMANN, J., POPP, W., DELGERMAA, B., OTGONBAYAR, D., GANTUMUR, T., BUER, J. & TSOGBADRAKH, N. 2020. Two fatal cases of plague after consumption of raw marmot organs. *Emerg Microbes Infect*, 9, 1878–1880.
- KEHRMANN, J., EFFENBERG, L., WILK, C., SCHOEMER, D., NGO THI PHUONG, N., ADAMCZYK, A., PASTILLE, E., SCHOLTYSIK, R., KLEIN-HITPASS, L., KLOPFLEISCH, R., WESTENDORF, A. M. & BUER, J. 2020. Depletion of Foxp3(+) regulatory T cells is accompanied by an increase in the relative abundance of Firmicutes in the murine gut microbiome. *Immunology*, 159, 344–353.
- DOMNICH, M., RIEDESEL, J., PYLAEVA, E., KURTEN, C. H. L., BUER, J., LANG, S. & JABLONSKA, J. 2020. Oral Neutrophils: Underestimated Players in Oral Cancer. *Front Immunol*, 11, 565683.

- CHOUDHURY, A. R., JU, Z., DJOJOSUBROTO, M. W., SCHIENKE, A., LECHER, A., SCHAEZLEIN, S., JIANG, H., STEPCZYNSKA, A., WANG, C., BUER, J., LEE, H. W., VON ZGLINICKI, T., GANSER, A., SCHIRMACHER, P., NAKAUCHI, H. & RUDOLPH, K. L. 2020. Author Correction: Cdkn1a deletion improves stem cell function and lifespan of mice with dysfunctional telomeres without accelerating cancer formation. *Nat Genet*, 52, 548.
- BECK, S., SEHL, C., VOORTMANN, S., VERHASSELT, H. L., EDWARDS, M. J., BUER, J., HASENBERG, M., GULBINS, E. & BECKER, K. A. 2020. Sphingosine is able to prevent and eliminate Staphylococcus epidermidis biofilm formation on different orthopedic implant materials in vitro. *J Mol Med (Berl)*, 98, 209–219.
- BECK, S., SEHL, C., VOORTMANN, S., VERHASSELT, H. L., EDWARDS, M. J., BUER, J., HASENBERG, M., GULBINS, E. & BECKER, K. A. 2020. Sphingosine is able to prevent and eliminate Staphylococcus epidermidis biofilm formation on different orthopedic implant materials in vitro. *J Mol Med (Berl)*, 98, 209–219.
- VERHASSELT, H. L., RADKE, J., SCHMIDT, D., KILLENGRAY, D., SCHARMANN, U., RICKERTS, V., HANSEN, W., SEIDEL, D., FALCES-ROMERO, I., BUER, J., RATH, P. M. & STEINMANN, J. 2019. Comparison of genotyping methods for Cunninghamella bertholletiae. *Mycoses*, 62, 519–525.
- THIEL, J., ALTER, C., LUPPUS, S., ECKSTEIN, A., TAN, S., FUHRER, D., PASTILLE, E., WESTENDORF, A. M., BUER, J. & HANSEN, W. 2019. MicroRNA-183 and microRNA-96 are associated with autoimmune responses by regulating T cell activation. *J Autoimmun*, 96, 94–103.
- SOKOLOVA, V., SHI, Z., HUANG, S., DU, Y., KOPP, M., FREDE, A., KNUSCHKE, T., BUER, J., YANG, D., WESTENDORF, A. M. & EPPLER, M. 2019. Session 5: Biomaterials - Inorganic. *Biomed Tech (Berl)*, 64, 36–40.
- ROSS, B., KRULL, M., RATH, P., KRIBBEN, A., DOPADLIK, D., ERLEMANN, I., WIEGARD-SZRAMK, I., TYCZYNSKI, B., BUER, J. & HERBSTREIT, F. 2019. Dialysis drains as a possible source for carbapenem-resistant pathogens causing an ICU outbreak. *Infection*, 47, 233–238.
- PASTILLE, E., WASMER, M. H., ADAMCZYK, A., VU, V. P., MAGER, L. F., PHUONG, N. N. T., PALMIERI, V., SIMILLION, C., HANSEN, W., KASPER, S., SCHULER, M., MUGGLI, B., MCCOY, K. D., BUER, J., ZLOBEC, I., WESTENDORF, A. M. & KREBS, P. 2019. The IL-33/ST2 pathway shapes the regulatory T cell phenotype to promote intestinal cancer. *Mucosal Immunol*, 12, 990–1003.
- OZMEN, D., OZKAN, N., GUBERINA, N., FLIESSBACH, K., SUNTHARALINGAM, S., THEYSOHN, J., BUCHTER, M., FORSTING, M., BUER, J., DUDDA, M., JAGER, M. & WETTER, A. 2019. Computed-tomography-guided biopsy in suspected spondylodiscitis: Single-center experience including 201 biopsy procedures. *Orthop Rev (Pavia)*, 11, 7793.
- MEINERS, J., PALMIERI, V., KLOPFLEISCH, R., EBEL, J. F., JAPTOK, L., SCHUMACHER, F., YUSUF, A. M., BECKER, K. A., ZOLLER, J., HOSE, M., KLEUSER, B., HERMANN, D. M., KOLESNICK, R. N., BUER, J., HANSEN, W. & WESTENDORF, A. M. 2019. Intestinal Acid Sphingomyelinase Protects From Severe Pathogen-Driven Colitis. *Front Immunol*, 10, 1386.

- KRULL, M., STEINMANN, J., HEINTSCHEL VON HEINEGG, E., BUER, J., SUCHARSKI, A., MATTHEIS, S., LANG, S. & ROSS, B. 2019. Microbiological contamination of ear, nose and throat (ENT) units. *GMS Hyg Infect Control*, 14, Doc03.
- KIEFFER, D., PAROHL, N., BUER, J., ROSS, B. & POPP, W. 2019. Betten- und Nacttisch-Aufbereitung im Krankenhaus nach Entlassung - eine Pilotstudie. *HygMed*, 44, D114–D117.
- KEHRMANN, J., MENZEL, J., SAEEDGHALATI, M., OBEID, R., SCHULZE, C., HOLZENDORF, V., FARAHPOUR, F., REINSCH, N., KLEIN-HITPASS, L., STREECK, H., HOFFMANN, D., BUER, J., ESSER, S. & GROUP, H.-H. S. 2019. Gut Microbiota in Human Immunodeficiency Virus-Infected Individuals Linked to Coronary Heart Disease. *J Infect Dis*, 219, 497–508.
- HESSE, C., KOLLEND, S., ROTAN, O., PASTILLE, E., ADAMCZYK, A., WENZEK, C., HANSEN, W., EPPLE, M., BUER, J., WESTENDORF, A. M. & KNUSCHKE, T. 2019. A Tumor-Peptide-Based Nanoparticle Vaccine Elicits Efficient Tumor Growth Control in Antitumor Immunotherapy. *Mol Cancer Ther*, 18, 1069–1080.
- BONGARD, J., SCHMITZ, A. L., WOLF, A., ZISCHINSKY, G., PIEREN, M., SCHELLHORN, B., BRAVO-RODRIGUEZ, K., SCHILLINGER, J., KOCH, U., NUSSBAUMER, P., KLEBL, B., STEINMANN, J., BUER, J., SANCHEZ-GARCIA, E., EHRMANN, M. & KAISER, M. 2019. Chemical Validation of DegS As a Target for the Development of Antibiotics with a Novel Mode of Action. *ChemMedChem*, 14, 1074–1078.
- SOKOLOVA, V., LOZA, K., KNUSCHKE, T., HEINEN-WEILER, J., JASTROW, H., HASENBERG, M., BUER, J., WESTENDORF, A. M., GUNZER, M. & EPPLE, M. 2018. A systematic electron microscopic study on the uptake of barium sulphate nano-, submicro-, microparticles by bone marrow-derived phagocytosing cells. *Acta Biomater*, 80, 352–363.
- SEUFERT, R., SEDLACEK, L., KAHL, B., HOGARDT, M., HAMPRECHT, A., HAASE, G., GUNZER, F., HAAS, A., GRAULING-HALAMA, S., MACKENZIE, C. R., ESSIG, A., STEHLING, F., SUTHARSAN, S., DITTMER, S., KILLENGRAY, D., SCHMIDT, D., ESKANDARIAN, N., STEINMANN, E., BUER, J., HAGEN, F., MEIS, J. F., RATH, P. M. & STEINMANN, J. 2018. Prevalence and characterization of azole-resistant *Aspergillus fumigatus* in patients with cystic fibrosis: a prospective multicentre study in Germany. *J Antimicrob Chemother*, 73, 2047–2053.
- ROBAK, O. H., HEIMESAAT, M. M., KRUGLOV, A. A., PREPENS, S., NINNEMANN, J., GUTBIER, B., REPPE, K., HOCHREIN, H., SUTER, M., KIRSCHNING, C. J., MARATHE, V., BUER, J., HORNEF, M. W., SCHNARE, M., SCHNEIDER, P., WITZENRATH, M., BERESWILL, S., STEINHOFF, U., SUTTORP, N., SANDER, L. E., CHAPUT, C. & OPITZ, B. 2018. Antibiotic treatment-induced secondary IgA deficiency enhances susceptibility to *Pseudomonas aeruginosa* pneumonia. *J Clin Invest*, 128, 3535–3545.
- OLSOWSKI, M., HOFFMANN, F., HAIN, A., KIRCHHOFF, L., THEEGARTEN, D., TODT, D., STEINMANN, E., BUER, J., RATH, P. M. & STEINMANN, J. 2018. *Exophiala dermatitidis* isolates from various sources: using alternative invertebrate host organisms (*Caenorhabditis elegans* and *Galleria mellonella*) to determine virulence. *Sci Rep*, 8, 12747.
- KNUSCHKE, T., ROTAN, O., BAYER, W., KOLLEND, S., DICKOW, J., SUTTER, K., HANSEN, W., DITTMER, U., LANG, K. S., EPPLE, M., BUER, J. & WESTENDORF, A. M. 2018. Induction of Type I Interferons by Therapeutic Nanoparticle-Based Vaccination Is

- Indispensable to Reinforce Cytotoxic CD8(+) T Cell Responses During Chronic Retroviral Infection. *Front Immunol*, 9, 614.
- KEHRMANN, J., CHAPOT, V., BUER, J., RATING, P., BORNFELD, N. & STEINMANN, J. 2018. Diagnostic performance of blood culture bottles for vitreous culture compared to conventional microbiological cultures in patients with suspected endophthalmitis. *Eur J Clin Microbiol Infect Dis*, 37, 889–895.
- HOING, B., KIRCHHOFF, L., ARNOLDS, J., HUSSAIN, T., BUER, J., LANG, S., ARWEILER-HARBECK, D. & STEINMANN, J. 2018. Bioactive Glass Granules Inhibit Mature Bacterial Biofilms on the Surfaces of Cochlear Implants. *Otol Neurotol*, 39, e985–e991.
- WESTENDORF, A. M., SKIBBE, K., ADAMCZYK, A., BUER, J., GEFFERS, R., HANSEN, W., PASTILLE, E. & JENDROSSEK, V. 2017. Hypoxia Enhances Immunosuppression by Inhibiting CD4+ Effector T Cell Function and Promoting Treg Activity. *Cell Physiol Biochem*, 41, 1271–1284.
- UEFFING, K., ABBERGER, H., WESTENDORF, A. M., MATUSCHEWSKI, K., BUER, J. & HANSEN, W. 2017. Conventional CD11c(high) Dendritic Cells Are Important for T Cell Priming during the Initial Phase of Plasmodium yoelii Infection, but Are Dispensable at Later Time Points. *Front Immunol*, 8, 1333.
- SOKOLOVA, V., SHI, Z., HUANG, S., DU, Y., KOPP, M., FREDE, A., KNUSCHKE, T., BUER, J., YANG, D., WU, J., WESTENDORF, A. M. & EPPLER, M. 2017. Delivery of the TLR ligand poly(I:C) to liver cells in vitro and in vivo by calcium phosphate nanoparticles leads to a pronounced immunostimulation. *Acta Biomater*, 64, 401–410.
- PASTILLE, E., FREDE, A., MCSORLEY, H. J., GRAB, J., ADAMCZYK, A., KOLLEND, S., HANSEN, W., EPPLER, M., BUER, J., MAIZELS, R. M., KLOPFLEISCH, R. & WESTENDORF, A. M. 2017. Intestinal helminth infection drives carcinogenesis in colitis-associated colon cancer. *PLoS Pathog*, 13, e1006649.
- PAROHL, N., STIEFENHOFER, D., HEILIGTAG, S., REUTER, H., DOPADLIK, D., MOSEL, F., GERKEN, G., DECHENE, A., HEINTSCHEL VON HEINEGG, E., JOCHUM, C., BUER, J. & POPP, W. 2017. Monitoring of endoscope reprocessing with an adenosine triphosphate (ATP) bioluminescence method. *GMS Hyg Infect Control*, 12, Doc04.
- MA, Z., LIU, J., WU, W., ZHANG, E., ZHANG, X., LI, Q., ZELINSKY, G., BUER, J., DITTMER, U., KIRSCHNING, C. J. & LU, M. 2017. The IL-1R/TLR signaling pathway is essential for efficient CD8(+) T-cell responses against hepatitis B virus in the hydrodynamic injection mouse model. *Cell Mol Immunol*, 14, 997–1008.
- LOEVENICH, K., UEFFING, K., ABEL, S., HOSE, M., MATUSCHEWSKI, K., WESTENDORF, A. M., BUER, J. & HANSEN, W. 2017. DC-Derived IL-10 Modulates Pro-inflammatory Cytokine Production and Promotes Induction of CD4(+)IL-10(+) Regulatory T Cells during Plasmodium yoelii Infection. *Front Immunol*, 8, 152.
- KLEIN, J. C., MOSES, K., ZELINSKY, G., SODY, S., BUER, J., LANG, S., HELFRICH, I., DITTMER, U., KIRSCHNING, C. J. & BRANDAU, S. 2017. Combined toll-like receptor 3/7/9 deficiency on host cells results in T-cell-dependent control of tumour growth. *Nat Commun*, 8, 14600.
- KIRCHHOFF, L., OLSOWSKI, M., ZILMANS, K., DITTMER, S., HAASE, G., SEDLACEK, L., STEINMANN, E., BUER, J., RATH, P. M. & STEINMANN, J. 2017. Biofilm formation of the black yeast-like fungus *Exophiala dermatitidis* and its susceptibility to anti-infective agents. *Sci Rep*, 7, 42886.

- KEHRMANN, J., VECKOLLARI, B., SCHMIDT, D., SCHILDGEN, O., SCHILDGEN, V., WAGNER, N., ZESCHNIGK, M., KLEIN-HITPASS, L., WITZKE, O., BUER, J. & STEINMANN, J. 2017. The lung microbiome in patients with pneumocystosis. *BMC Pulm Med*, 17, 170.
- GROSSE-ONNEBRINK, J., STEHLING, F., TSCHIEDEL, E., OLIVIER, M., MELLIES, U., SCHMIDT, R., BUER, J., RATH, P. M. & STEINMANN, J. 2017. Bacteraemia and fungaemia in cystic fibrosis patients with febrile pulmonary exacerbation: a prospective observational study. *BMC Pulm Med*, 17, 96.
- FREDE, A., NEUHAUS, B., KNUSCHKE, T., WADWA, M., KOLLEND, S., KLOPFLEISCH, R., HANSEN, W., BUER, J., BRUDER, D., EPPLE, M. & WESTENDORF, A. M. 2017. Local delivery of siRNA-loaded calcium phosphate nanoparticles abates pulmonary inflammation. *Nanomedicine*, 13, 2395–2403.
- ADAMCZYK, A., GAGEIK, D., FREDE, A., PASTILLE, E., HANSEN, W., RUEFFER, A., BUER, J., BUNING, J., LANGHORST, J. & WESTENDORF, A. M. 2017. Differential expression of GPR15 on T cells during ulcerative colitis. *JCI Insight*, 2.
- WADWA, M., KLOPFLEISCH, R., BUER, J. & WESTENDORF, A. M. 2016. Targeting Antigen to Dec-205 on Dendritic Cells Induces Immune Protection in Experimental Colitis in Mice. *Eur J Microbiol Immunol (Bp)*, 6, 1–8.
- WADWA, M., KLOPFLEISCH, R., ADAMCZYK, A., FREDE, A., PASTILLE, E., MAHNKE, K., HANSEN, W., GEFFERS, R., LANG, K. S., BUER, J., BUNING, J. & WESTENDORF, A. M. 2016. IL-10 downregulates CXCR3 expression on Th1 cells and interferes with their migration to intestinal inflammatory sites. *Mucosal Immunol*, 9, 1263–77.
- TROGER, B., HARTEL, C., BUER, J., DORDELMANN, M., FELDERHOFF-MUSER, U., HOHN, T., HEPPIG, N., HILLEBRAND, G., KRIBS, A., MARISSSEN, J., OLBERTZ, D., RATH, P. M., SCHMIDTKE, S., SIEGEL, J., HERTING, E., GOPEL, W., STEINMANN, J. & STEIN, A. 2016. Clinical Relevance of Pathogens Detected by Multiplex PCR in Blood of Very-Low-Birth Weight Infants with Suspected Sepsis - Multicentre Study of the German Neonatal Network. *PLoS One*, 11, e0159821.
- STEINMANN, J., DITTMER, S., HOUBRAKEN, J., BUER, J. & RATH, P. M. 2016. In Vitro Activity of Isavuconazole against *Rasamsonia* Species. *Antimicrob Agents Chemother*, 60, 6890–6891.
- STEINMANN, J., BUER, J. & RATH, P. M. 2016. Detection of *Aspergillus fumigatus* in Blood Samples from Critically Ill Patients in Intensive Care Units by Use of the SeptiFast Assay. *J Clin Microbiol*, 54, 1918–1921.
- KRULL, M., KLARE, I., ROSS, B., TRENSCHEL, R., BEELEN, D. W., TODT, D., STEINMANN, E., BUER, J., RATH, P. M. & STEINMANN, J. 2016. Emergence of linezolid- and vancomycin-resistant *Enterococcus faecium* in a department for hematologic stem cell transplantation. *Antimicrob Resist Infect Control*, 5, 31.
- KNUSCHKE, T., ROTAN, O., BAYER, W., SOKOLOVA, V., HANSEN, W., SPARWASSER, T., DITTMER, U., EPPLE, M., BUER, J. & WESTENDORF, A. M. 2016. Combination of nanoparticle-based therapeutic vaccination and transient ablation of regulatory T cells enhances anti-viral immunity during chronic retroviral infection. *Retrovirology*, 13, 24.
- KLOTZ, U., SCHMIDT, D., WILLINGER, B., STEINMANN, E., BUER, J., RATH, P. M. & STEINMANN, J. 2016. Echinocandin resistance and population structure of invasive *Candida glabrata* isolates from two university hospitals in Germany and Austria. *Mycoses*, 59, 312–8.

- KEHRMANN, J., WESSEL, S., MURALI, R., HAMPEL, A., BANGE, F. C., BUER, J. & MOSEL, F. 2016. Principal component analysis of MALDI TOF MS mass spectra separates *M. abscessus* (sensu stricto) from *M. massiliense* isolates. *BMC Microbiol*, 16, 24.
- KEHRMANN, J., SCHOERDING, A. K., MURALI, R., WESSEL, S., KOEHLING, H. L., MOSEL, F. & BUER, J. 2016. Performance of Vitek MS in identifying nontuberculous mycobacteria from MGIT liquid medium and Lowenstein-Jensen solid medium. *Diagn Microbiol Infect Dis*, 84, 43–47.
- KEHRMANN, J., KURT, N., RUEGER, K., BANGE, F. C. & BUER, J. 2016. GenoType NTM-DR for Identifying Mycobacterium abscessus Subspecies and Determining Molecular Resistance. *J Clin Microbiol*, 54, 1653–1655.
- GOLLNICK, H. P., BUER, J., BEISSERT, S. & SUNDERKATTER, C. 2016. Verantwortlicher Umgang mit Antibiotika: Notwendigkeit der Antibiotikareduktion in der Aknetherapie. *J Dtsch Dermatol Ges*, 14, 1319–1327.
- GAMRAD, L., REHBOCK, C., WESTENDORF, A. M., BUER, J., BARCIKOWSKI, S. & HANSEN, W. 2016. Efficient nucleic acid delivery to murine regulatory T cells by gold nanoparticle conjugates. *Sci Rep*, 6, 28709.
- FREDE, A., NEUHAUS, B., KLOPFLEISCH, R., WALKER, C., BUER, J., MULLER, W., EPPLE, M. & WESTENDORF, A. M. 2016. Colonic gene silencing using siRNA-loaded calcium phosphate/PLGA nanoparticles ameliorates intestinal inflammation in vivo. *J Control Release*, 222, 86–96.
- ABEL, S., UEFFING, K., TATURA, R., HUTZLER, M., HOSE, M., MATUSCHEWSKI, K., KEHRMANN, J., WESTENDORF, A. M., BUER, J. & HANSEN, W. 2016. Plasmodium yoelii infection of BALB/c mice results in expansion rather than induction of CD4(+) Foxp3(+) regulatory T cells. *Immunology*, 148, 197–205.
- TATURA, R., ZESCHNIGK, M., HANSEN, W., STEINMANN, J., VIDIGAL, P. G., HUTZLER, M., PASTILLE, E., WESTENDORF, A. M., BUER, J. & KEHRMANN, J. 2015. Relevance of Foxp3(+) regulatory T cells for early and late phases of murine sepsis. *Immunology*, 146, 144–56.
- STEINMANN, J., HAMPRECHT, A., VEHRESCHILD, M. J., CORNELLY, O. A., BUCHHEIDT, D., SPIESS, B., KOLDEHOFF, M., BUER, J., MEIS, J. F. & RATH, P. M. 2015. Emergence of azole-resistant invasive aspergillosis in HSCT recipients in Germany. *J Antimicrob Chemother*, 70, 1522–6.
- SEIFFART, V., ZOELLER, J., KLOPFLEISCH, R., WADWA, M., HANSEN, W., BUER, J., RIEDEL, C. & WESTENDORF, A. M. 2015. IL10-Deficiency in CD4(+) T Cells Exacerbates the IFN γ and IL17 Response During Bacteria Induced Colitis. *Cell Physiol Biochem*, 36, 1259–73.
- RATH, P. M., SCHOCH, B., ADAMZIK, M., STEINMANN, E., BUER, J. & STEINMANN, J. 2015. Reply: PCR assay for pathogen detection in ventriculostomy-related meningitis in neurosurgery patients: unanswered questions? *Infection*, 43, 251–2.
- NIEZOLD, T., STORCKSDIECK GENANNT BONSMANN, M., MAASKE, A., TEMCHURA, V., HEINECKE, V., HANNAMAN, D., BUER, J., EHRHARDT, C., HANSEN, W., UBERLA, K. & TENBUSCH, M. 2015. DNA vaccines encoding DEC205-targeted antigens: immunity or tolerance? *Immunology*, 145, 519–33.
- KRUGER, A., OLDENBURG, M., CHEBROLU, C., BEISSER, D., KOLTER, J., SIGMUND, A. M., STEINMANN, J., SCHAFFER, S., HOCHREIN, H., RAHMANN, S., WAGNER, H.,

- HENNEKE, P., HORNUNG, V., BUER, J. & KIRSCHNING, C. J. 2015. Human TLR8 senses UR/URR motifs in bacterial and mitochondrial RNA. *EMBO Rep*, 16, 1656–63.
- KOEHLING, H. L., WILLINGER, B., BUER, J., RATH, P. M. & STEINMANN, J. 2015. Comparative evaluation of a new commercial colorimetric microdilution assay (SensiQuattro Candida EU) with MIC test strip and EUCAST broth microdilution methods for susceptibility testing of invasive Candida isolates. *J Clin Microbiol*, 53, 255–61.
- CHEBROLU, C., ARTNER, D., SIGMUND, A. M., BUER, J., ZAMYATINA, A. & KIRSCHNING, C. J. 2015. Species and mediator specific TLR4 antagonism in primary human and murine immune cells by betaGlcN(1<--->1)alphaGlc based lipid A mimetics. *Mol Immunol*, 67, 636–41.
- VIDIGAL, P. G., MUSKEN, M., BECKER, K. A., HAUSSLER, S., WINGENDER, J., STEINMANN, E., KEHRMANN, J., GULBINS, E., BUER, J., RATH, P. M. & STEINMANN, J. 2014. Effects of green tea compound epigallocatechin-3-gallate against *Stenotrophomonas maltophilia* infection and biofilm. *PLoS One*, 9, e92876.
- VIDIGAL, P. G., MOSEL, F., KOEHLING, H. L., MUELLER, K. D., BUER, J., RATH, P. M. & STEINMANN, J. 2014. Delineation of *Stenotrophomonas maltophilia* isolates from cystic fibrosis patients by fatty acid methyl ester profiles and matrix-assisted laser desorption/ionization time-of-flight mass spectra using hierarchical cluster analysis and principal component analysis. *J Med Microbiol*, 63, 1615–1620.
- VIDIGAL, P. G., DITTMER, S., STEINMANN, E., BUER, J., RATH, P. M. & STEINMANN, J. 2014. Adaptation of *Stenotrophomonas maltophilia* in cystic fibrosis: molecular diversity, mutation frequency and antibiotic resistance. *Int J Med Microbiol*, 304, 613–9.
- STEINMANN, J., GIRAUD, S., SCHMIDT, D., SEDLACEK, L., HAMPRECHT, A., HOUBRAKEN, J., MEIS, J. F., BOUCHARA, J. P., BUER, J. & RATH, P. M. 2014. Validation of a novel real-time PCR for detecting *Rasamsonia argillacea* species complex in respiratory secretions from cystic fibrosis patients. *New Microbes New Infect*, 2, 72–8.
- ROSS, B., STEINMANN, J., BUER, J., DUSSE, F., JAKOB, H., SCHNEEMANN, H., HUGO-HANKE, S., BRAUTIGAM, S., SANEWSKI, A., KUNDT, R., PAROHL, N., WEIDLER, K., WITZKE, O. & POPP, W. 2014. [Outbreak with *Ralstonia pickettii* caused by contaminated magnesium vials]. *Dtsch Med Wochenschr*, 139, 323–6.
- RATH, P. M., SCHOCH, B., ADAMZIK, M., STEINMANN, E., BUER, J. & STEINMANN, J. 2014. Value of multiplex PCR using cerebrospinal fluid for the diagnosis of ventriculostomy-related meningitis in neurosurgery patients. *Infection*, 42, 621–7.
- PASTILLE, E., BARDINI, K., FLEISSNER, D., ADAMCZYK, A., FREDE, A., WADWA, M., VON SMOLINSKI, D., KASPER, S., SPARWASSER, T., GRUBER, A. D., SCHULER, M., SAKAGUCHI, S., ROERS, A., MULLER, W., HANSEN, W., BUER, J. & WESTENDORF, A. M. 2014. Transient ablation of regulatory T cells improves antitumor immunity in colitis-associated colon cancer. *Cancer Res*, 74, 4258–69.
- LANGHORST, J., FREDE, A., KNOTT, M., PASTILLE, E., BUER, J., DOBOS, G. J. & WESTENDORF, A. M. 2014. Distinct kinetics in the frequency of peripheral CD4+ T cells in patients with ulcerative colitis experiencing a flare during treatment with mesalazine or with a herbal preparation of myrrh, chamomile, and coffee charcoal. *PLoS One*, 9, e104257.
- KOZLOVA, D., SOKOLOVA, V., ZHONG, M., ZHANG, E., YANG, J., LI, W., YANG, Y., BUER, J., WESTENDORF, A. M., EPPLE, M. & YAN, H. 2014. Calcium phosphate

- nanoparticles show an effective activation of the innate immune response in vitro and in vivo after functionalization with flagellin. *Virology*, 29, 33–9.
- KNUSCHKE, T., BAYER, W., ROTAN, O., SOKOLOVA, V., WADWA, M., KIRSCHNING, C. J., HANSEN, W., DITTMER, U., EPPLE, M., BUER, J. & WESTENDORF, A. M. 2014. Prophylactic and therapeutic vaccination with a nanoparticle-based peptide vaccine induces efficient protective immunity during acute and chronic retroviral infection. *Nanomedicine*, 10, 1787–98.
- KEHRMANN, J., TATURA, R., ZESCHNIGK, M., PROBST-KEPPER, M., GEFFERS, R., STEINMANN, J. & BUER, J. 2014. Impact of 5-aza-2'-deoxycytidine and epigallocatechin-3-gallate for induction of human regulatory T cells. *Immunology*, 142, 384–95.
- JOST, N. H., ABEL, S., HUTZLER, M., SPARWASSER, T., ZIMMERMANN, A., ROERS, A., MULLER, W., KLOPFLEISCH, R., HENGEL, H., WESTENDORF, A. M., BUER, J. & HANSEN, W. 2014. Regulatory T cells and T-cell-derived IL-10 interfere with effective anti-cytomegalovirus immune response. *Immunol Cell Biol*, 92, 860–71.
- JOCKENHOFER, F., CHAPOT, V., STOFFELS-WEINDORF, M., KORBER, A., KLODE, J., BUER, J., KUPPER, B., ROESCH, A. & DISSEMOND, J. 2014. Bacterial spectrum colonizing chronic leg ulcers: a 10-year comparison from a German wound care center. *J Dtsch Dermatol Ges*, 12, 1121–7.
- HERZ, J., HAGEN, S. I., BERGMULLER, E., SABELLEK, P., GOTHERT, J. R., BUER, J., HANSEN, W., HERMANN, D. M. & DOEPPNER, T. R. 2014. Exacerbation of ischemic brain injury in hypercholesterolemic mice is associated with pronounced changes in peripheral and cerebral immune responses. *Neurobiol Dis*, 62, 456–68.
- AL GHAZAL, P., KORBER, A., KLODE, J., SCHMID, E. N., BUER, J. & DISSEMOND, J. 2014. Evaluation of the Essen Rotary as a new technique for bacterial swabs: results of a prospective controlled clinical investigation in 50 patients with chronic leg ulcers. *Int Wound J*, 11, 44–9.
- STEINMANN, J., BUER, J., PIETSCHMANN, T. & STEINMANN, E. 2013. Anti-infective properties of epigallocatechin-3-gallate (EGCG), a component of green tea. *Br J Pharmacol*, 168, 1059–73.
- SOKOLOVA, V., KOZLOVA, D., KNUSCHKE, T., BUER, J., WESTENDORF, A. M. & EPPLE, M. 2013. Mechanism of the uptake of cationic and anionic calcium phosphate nanoparticles by cells. *Acta Biomater*, 9, 7527–35.
- SCHEMUTH, H., DITTMER, S., LACKNER, M., SEDLACEK, L., HAMPRECHT, A., STEINMANN, E., BUER, J., RATH, P. M. & STEINMANN, J. 2013. In vitro activity of colistin as single agent and in combination with antifungals against filamentous fungi occurring in patients with cystic fibrosis. *Mycoses*, 56, 297–303.
- KNUSCHKE, T., SOKOLOVA, V., ROTAN, O., WADWA, M., TENBUSCH, M., HANSEN, W., STAEHELI, P., EPPLE, M., BUER, J. & WESTENDORF, A. M. 2013. Immunization with biodegradable nanoparticles efficiently induces cellular immunity and protects against influenza virus infection. *J Immunol*, 190, 6221–9.
- GONCALVES VIDIGAL, P., SCHMIDT, D., STEHLING, F., MELLIES, U., STEINMANN, E., BUER, J., RATH, P. M. & STEINMANN, J. 2013. Development of a quantitative immunofluorescence assay for detection of *Stenotrophomonas maltophilia* antibodies in patients with cystic fibrosis. *J Cyst Fibros*, 12, 651–4.

- TSCHIEDEL, E., STEINMANN, J., BUER, J., ONNEBRINK, J. G., FELDERHOFF-MUSER, U., RATH, P. M. & DOHNA-SCHWAKE, C. 2012. Results and relevance of molecular detection of pathogens by SeptiFast--a retrospective analysis in 75 critically ill children. *Klin Padiatr*, 224, 12–6.
- TOSIEK, M. J., BADER, S. R., GRUBER, A. D., BUER, J., GEREKE, M. & BRUDER, D. 2012. CD8(+) T cells responding to alveolar self-antigen lack CD25 expression and fail to precipitate autoimmunity. *Am J Respir Cell Mol Biol*, 47, 869–78.
- TATURA, R., ZESCHNIGK, M., ADAMZIK, M., PROBST-KEPPER, M., BUER, J. & KEHRMANN, J. 2012. Quantification of regulatory T cells in septic patients by real-time PCR-based methylation assay and flow cytometry. *PLoS One*, 7, e49962.
- ROSS, B., WITZKE, O., KRIBBEN, A., HEINTSCHEL VON HEINEGG, E., BUER, J., GERKEN, G., FIEDLER, M. & POPP, W. 2012. [Managing EHEC in hospital routine]. *Dtsch Med Wochenschr*, 137, 933–6.
- RISS, G. L., CHANG, D. I., WEVERS, C., WESTENDORF, A. M., BUER, J., SCHERBAUM, N. & HANSEN, W. 2012. Opioid maintenance therapy restores CD4+ T cell function by normalizing CD4+CD25(high) regulatory T cell frequencies in heroin user. *Brain Behav Immun*, 26, 972–8.
- RATH, P. M., SANER, F., PAUL, A., LEHMANN, N., STEINMANN, E., BUER, J. & STEINMANN, J. 2012. Multiplex PCR for rapid and improved diagnosis of bloodstream infections in liver transplant recipients. *J Clin Microbiol*, 50, 2069–71.
- RATH, P. M., BUCHHEIDT, D., SPIESS, B., ARFANIS, E., BUER, J. & STEINMANN, J. 2012. First reported case of azole-resistant aspergillus fumigatus due to the TR/L98H mutation in Germany. *Antimicrob Agents Chemother*, 56, 6060–1.
- OLDENBURG, M., KRUGER, A., FERSTL, R., KAUFMANN, A., NEES, G., SIGMUND, A., BATHKE, B., LAUTERBACH, H., SUTER, M., DREHER, S., KOEDEL, U., AKIRA, S., KAWAI, T., BUER, J., WAGNER, H., BAUER, S., HOCHREIN, H. & KIRSCHNING, C. J. 2012. TLR13 recognizes bacterial 23S rRNA devoid of erythromycin resistance-forming modification. *Science*, 337, 1111–5.
- METZ, C. H., BUER, J., BORNFELD, N. & LIPSKI, A. 2012. Bilateral Bartonella henselae neuroretinitis with stellate maculopathy in a 6-year-old boy. *Infection*, 40, 191–4.
- KOZLOVA, D., CHERNOUSOVA, S., KNUSCHKE, T., BUER, J., WESTENDORF, A. M. & EPPLE, M. 2012. Cell targeting by antibody-functionalized calcium phosphate nanoparticles. *Journal of Materials Chemistry*, 22, 396–404.
- KOHLING, H. L., BITTNER, A., MULLER, K. D., BUER, J., BECKER, M., RUBBEN, H., RETTENMEIER, A. W. & MOSEL, F. 2012. Direct identification of bacteria in urine samples by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry and relevance of defensins as interfering factors. *J Med Microbiol*, 61, 339–344.
- JERON, A., HANSEN, W., EWERT, F., BUER, J., GEFFERS, R. & BRUDER, D. 2012. ChIP-on-chip analysis identifies IL-22 as direct target gene of ectopically expressed FOXP3 transcription factor in human T cells. *BMC Genomics*, 13, 705.
- HEINTSCHEL VON HEINEGG, E., STEINMANN, J., BUER, J. & RATH, P. 2012. Infektionen durch Pilze. In: THOMAS, L. (ed.) *Labor und Diagnose*. 8 ed.: TH-Books.
- HANSEN, W., HUTZLER, M., ABEL, S., ALTER, C., STOCKMANN, C., KLICHE, S., ALBERT, J., SPARWASSER, T., SAKAGUCHI, S., WESTENDORF, A. M., SCHADENDORF, D.,

- BUER, J. & HELFRICH, I. 2012. Neuropilin 1 deficiency on CD4⁺Foxp3⁺ regulatory T cells impairs mouse melanoma growth. *J Exp Med*, 209, 2001–16.
- ABEL, S., LUCKHEIDE, N., WESTENDORF, A. M., GEFFERS, R., ROERS, A., MULLER, W., SPARWASSER, T., MATUSCHEWSKI, K., BUER, J. & HANSEN, W. 2012. Strong impact of CD4⁺ Foxp3⁺ regulatory T cells and limited effect of T cell-derived IL-10 on pathogen clearance during *Plasmodium yoelii* infection. *J Immunol*, 188, 5467–77.
- TOSIEK, M. J., GRUBER, A. D., BADER, S. R., MAUEL, S., HOYMANN, H. G., PRETTIN, S., TSCHERNIG, T., BUER, J., GEREKE, M. & BRUDER, D. 2011. CD4⁺CD25⁺Foxp3⁺ regulatory T cells are dispensable for controlling CD8⁺ T cell-mediated lung inflammation. *J Immunol*, 186, 6106–18.
- STEINMANN, J., SCHMIDT, D., BUER, J. & RATH, P. M. 2011. Discrimination of *Scedosporium prolificans* against *Pseudallescheria boydii* and *Scedosporium apiospermum* by semiautomated repetitive sequence-based PCR. *Med Mycol*, 49, 475–83.
- STEINMANN, J., KAASE, M., GATERMANN, S., POPP, W., STEINMANN, E., DAMMAN, M., PAUL, A., SANER, F., BUER, J. & RATH, P. 2011. Outbreak due to a *Klebsiella pneumoniae* strain harbouring KPC-2 and VIM-1 in a German university hospital, July 2010 to January 2011. *Euro Surveill*, 16.
- STEINMANN, J., HUELSEWEDE, J., BUER, J. & RATH, P. M. 2011. Comparison and evaluation of a novel bioassay and high-performance liquid chromatography for the clinical measurement of serum voriconazole concentrations. *Mycoses*, 54, e421–8.
- SOKOLOVA, V., KNUSCHKE, T., BUER, J., WESTENDORF, A. M. & EPPLE, M. 2011. Quantitative determination of the composition of multi-shell calcium phosphate-oligonucleotide nanoparticles and their application for the activation of dendritic cells. *Acta Biomater*, 7, 4029–36.
- SCHENK, U., FRASCOLI, M., PROIETTI, M., GEFFERS, R., TRAGGIAI, E., BUER, J., RICORDI, C., WESTENDORF, A. M. & GRASSI, F. 2011. ATP inhibits the generation and function of regulatory T cells through the activation of purinergic P2X receptors. *Sci Signal*, 4, ra12.
- LIPSKI, A., BUER, J., BORNFELD, N. & METZ, C. 2011. Katzenkrankheit - ein dicker Floh im Heuhaufen? . *Z. prakt. Augenheilkd.*, 32, 409–412.
- KEHRMANN, J., ZESCHNIGK, M., BUER, J. & PROBST-KEPPER, M. 2011. FOXP3 Expression in GARP-Transduced Helper T Cells Is Not Associated with FOXP3 TSDR Demethylation. *Transfus Med Hemother*, 38, 287–291.
- GONCALVES-VIDIGAL, P., GROSSE-ONNEBRINK, J., MELLIES, U., BUER, J., RATH, P. M. & STEINMANN, J. 2011. *Stenotrophomonas maltophilia* in cystic fibrosis: improved detection by the use of selective agar and evaluation of antimicrobial resistance. *J Cyst Fibros*, 10, 422–7.
- FLEISSNER, D., LOSER, K., HANSEN, W., DISSEMOND, J., KORBER, A., BEISSERT, S., BUER, J. & WESTENDORF, A. M. 2011. In vitro induced CD8⁺ regulatory T cells inhibit skin inflammation. *Eur J Microbiol Immunol (Bp)*, 1, 208–14.
- FLEISSNER, D., FREDE, A., KNOTT, M., KNUSCHKE, T., GEFFERS, R., HANSEN, W., DOBOS, G., LANGHORST, J., BUER, J. & WESTENDORF, A. M. 2011. Generation and function of immunosuppressive human and murine CD8⁺ T cells by transforming growth factor-beta and retinoic acid. *Immunology*, 134, 82–92.

- WESTENDORF, A. M., FLEISSNER, D., HANSEN, W. & BUER, J. 2010. T cells, dendritic cells and epithelial cells in intestinal homeostasis. *Int J Med Microbiol*, 300, 11–8.
- VERNADAKIS, S., ADAMZIK, M., HEUER, M., ANTOCH, G., BABA, H., FIEDLER, M., BUER, J., PAUL, A. & KAISER, G. M. 2010. [Hemicolectomy for ischemic colitis : A case report of a (H1N1) virus-associated death]. *Chirurg*, 81, 841–5.
- TRUNK, K., BENKERT, B., QUACK, N., MUNCH, R., SCHEER, M., GARBE, J., JANSCH, L., TROST, M., WEHLAND, J., BUER, J., JAHN, M., SCHOBERT, M. & JAHN, D. 2010. Anaerobic adaptation in *Pseudomonas aeruginosa*: definition of the Anr and Dnr regulons. *Environ Microbiol*, 12, 1719–33.
- STEINMANN, J., BUER, J. & RATH, P. M. 2010. Caspofungin: cross-reactivity in the *Aspergillus* antigen assay. *J Clin Microbiol*, 48, 2313.
- SOKOLOVA, V., KNUSCHKE, T., KOVTUN, A., BUER, J., EPPLE, M. & WESTENDORF, A. M. 2010. The use of calcium phosphate nanoparticles encapsulating Toll-like receptor ligands and the antigen hemagglutinin to induce dendritic cell maturation and T cell activation. *Biomaterials*, 31, 5627–33.
- PROBST-KEPPER, M. & BUER, J. 2010. FOXP3 and GARP (LRRC32): the master and its minion. *Biol Direct*, 5, 8.
- PROBST-KEPPER, M., BALLING, R. & BUER, J. 2010. FOXP3: required but not sufficient. the role of GARP (LRRC32) as a safeguard of the regulatory phenotype. *Curr Mol Med*, 10, 533–9.
- POPP, W., BUER, J., RATH, P.-M., STEINMANN, J., KUNDT, R., SCHEYTT, C. & HANSEN, D. 2010. MRSA - aktuelle Entwicklungen, drängende Probleme. *Krh.-Hyg. + Inf.verh.*, 32, 144–150.
- MENNING, A., LODDENKEMPER, C., WESTENDORF, A. M., SZILAGYI, B., BUER, J., SIEWERT, C., HAMANN, A. & HUEHN, J. 2010. Retinoic acid-induced gut tropism improves the protective capacity of Treg in acute but not in chronic gut inflammation. *Eur J Immunol*, 40, 2539–48.
- KORBER, A., SCHMID, E. N., BUER, J., KLODE, J., SCHADENDORF, D. & DISSEMOND, J. 2010. Bacterial colonization of chronic leg ulcers: current results compared with data 5 years ago in a specialized dermatology department. *J Eur Acad Dermatol Venereol*, 24, 1017–25.
- HANSEN, W., WESTENDORF, A. M., TOEPFER, T., MAUEL, S., GEFFERS, R., GRUBER, A. D. & BUER, J. 2010. Inflammation in vivo is modulated by GPR83 isoform-4 but not GPR83 isoform-1 expression in regulatory T cells. *Genes Immun*, 11, 357–61.
- FLEISSNER, D., HANSEN, W., GEFFERS, R., BUER, J. & WESTENDORF, A. M. 2010. Local induction of immunosuppressive CD8+ T cells in the gut-associated lymphoid tissues. *PLoS One*, 5, e15373.
- BAR-ON, L., BIRNBERG, T., LEWIS, K. L., EDELSON, B. T., BRUDER, D., HILDNER, K., BUER, J., MURPHY, K. M., REIZIS, B. & JUNG, S. 2010. CX3CR1+ CD8alpha+ dendritic cells are a steady-state population related to plasmacytoid dendritic cells. *Proc Natl Acad Sci U S A*, 107, 14745–50.
- WESTENDORF, A. M., FLEISSNER, D., GROEBE, L., JUNG, S., GRUBER, A. D., HANSEN, W. & BUER, J. 2009. CD4+Foxp3+ regulatory T cell expansion induced by antigen-driven interaction with intestinal epithelial cells independent of local dendritic cells. *Gut*, 58, 211–9.

- WALTER, U. B., J. 2009. Single cell immunology. *In*: ANSELMETTI, D. (ed.) *Single cell analysis - Technologies and applications*. Weinheim: Wiley-VCH.
- UKENA, S. N., KOENECKE, C., GEFERS, R., FUEHNER, T., WELTE, T., GANSER, A., BUER, J. & FRANZKE, A. 2009. T helper type 2 differentiation is associated with induction of antibacterial defense mechanisms in blood lymphocytes of patients with sarcoidosis. *Immunol Invest*, 38, 49–66.
- TREHANPATI, N., GEFERS, R., SUKRITI, HISSAR, S., RIESE, P., TOEPFER, T., BUER, J., KUMAR, M., GUZMAN, C. A. & SARIN, S. K. 2009. Gene expression signatures of peripheral CD4+ T cells clearly discriminate between patients with acute and chronic hepatitis B infection. *Hepatology*, 49, 781–90.
- STEINMANN, J., MARGGRAF, G., BUER, J. & RATH, P. M. 2009. Syphilis-specific immunoglobulin G seroconversion after double-lung transplantation. *J Heart Lung Transplant*, 28, 857–9.
- STEINMANN, J., BUER, J., RATH, P. M., PAUL, A. & SANER, F. 2009. Invasive aspergillosis in two liver transplant recipients: diagnosis by SeptiFast. *Transpl Infect Dis*, 11, 175–8.
- STARK, L., MATUSSEK, A., STRINDHALL, J., GEFERS, R., BUER, J., KIHLMSTROM, E., MONNECKE, S., LOFGREN, S. & LINDGREN, P. E. 2009. Staphylococcus aureus isolates from blood and anterior nares induce similar innate immune responses in endothelial cells. *APMIS*, 117, 814–24.
- PROBST-KEPPER, M., KROGER, A., GARRITSEN, H. S. & BUER, J. 2009. Perspectives on Regulatory T Cell Therapies. *Transfus Med Hemother*, 36, 302–308.
- PROBST-KEPPER, M., GEFERS, R., KROGER, A., VIEGAS, N., ERCK, C., HECHT, H. J., LUNSDORF, H., ROUBIN, R., MOHARREGH-KHIABANI, D., WAGNER, K., OCKLENBURG, F., JERON, A., GARRITSEN, H., ARSTILA, T. P., KEKALAINEN, E., BALLING, R., HAUSER, H., BUER, J. & WEISS, S. 2009. GARP: a key receptor controlling FOXP3 in human regulatory T cells. *J Cell Mol Med*, 13, 3343–57.
- LAHL, K., MAYER, C. T., BOPP, T., HUEHN, J., LODDENKEMPER, C., EBERL, G., WIRNSBERGER, G., DORNMAIR, K., GEFERS, R., SCHMITT, E., BUER, J. & SPARWASSER, T. 2009. Nonfunctional regulatory T cells and defective control of Th2 cytokine production in natural scurfy mutant mice. *J Immunol*, 183, 5662–72.
- JERON, A., PFOERTNER, S., BRUDER, D., GEFERS, R., HAMMERER, P., HOFMANN, R., BUER, J. & SCHRADER, A. J. 2009. Frequency and gene expression profile of regulatory T cells in renal cell carcinoma. *Tumour Biol*, 30, 160–70.
- GEREKE, M., JUNG, S., BUER, J. & BRUDER, D. 2009. Alveolar type II epithelial cells present antigen to CD4(+) T cells and induce Foxp3(+) regulatory T cells. *Am J Respir Crit Care Med*, 179, 344–55.
- DE BUHR, M. F., HEDRICH, H. J., WESTENDORF, A. M., OBERMEIER, F., HOFMANN, C., ZSCHEMISCH, N. H., BUER, J., BUMANN, D., GOYERT, S. M. & BLEICH, A. 2009. Analysis of Cd14 as a genetic modifier of experimental inflammatory bowel disease (IBD) in mice. *Inflamm Bowel Dis*, 15, 1824–36.
- VELDHOEN, M., UYTENHOVE, C., VAN SNICK, J., HELMBY, H., WESTENDORF, A., BUER, J., MARTIN, B., WILHELM, C. & STOCKINGER, B. 2008. Transforming growth factor-beta 'reprograms' the differentiation of T helper 2 cells and promotes an interleukin 9-producing subset. *Nat Immunol*, 9, 1341–6.

- VELDHOEN, M., HIROTA, K., WESTENDORF, A. M., BUER, J., DUMOUTIER, L., RENAULD, J. C. & STOCKINGER, B. 2008. The aryl hydrocarbon receptor links TH17-cell-mediated autoimmunity to environmental toxins. *Nature*, 453, 106–9.
- SEIFERT, O., BAYAT, A., GEFFERS, R., DIENUS, K., BUER, J., LOFGREN, S. & MATUSSEK, A. 2008. Identification of unique gene expression patterns within different lesional sites of keloids. *Wound Repair Regen*, 16, 254–65.
- SCHENK, U., WESTENDORF, A. M., RADAELLI, E., CASATI, A., FERRO, M., FUMAGALLI, M., VERDERIO, C., BUER, J., SCANZIANI, E. & GRASSI, F. 2008. Purinergic control of T cell activation by ATP released through pannexin-1 hemichannels. *Sci Signal*, 1, ra6.
- REINWALD, S., WIETHE, C., WESTENDORF, A. M., BRELOER, M., PROBST-KEPPER, M., FLEISCHER, B., STEINKASSERER, A., BUER, J. & HANSEN, W. 2008. CD83 expression in CD4+ T cells modulates inflammation and autoimmunity. *J Immunol*, 180, 5890–7.
- NICKELEIT, I., ZENDER, S., SASSE, F., GEFFERS, R., BRANDES, G., SORENSEN, I., STEINMETZ, H., KUBICKA, S., CARLOMAGNO, T., MENCHE, D., GUTGEMANN, I., BUER, J., GOSSLER, A., MANNS, M. P., KALESSE, M., FRANK, R. & MALEK, N. P. 2008. Argyrin a reveals a critical role for the tumor suppressor protein p27(kip1) in mediating antitumor activities in response to proteasome inhibition. *Cancer Cell*, 14, 23–35.
- HANSEN, W., WESTENDORF, A. M. & BUER, J. 2008. Regulatory T cells as targets for immunotherapy of autoimmunity and inflammation. *Inflamm Allergy Drug Targets*, 7, 217–23.
- HAILE, L. A., VON WASIELEWSKI, R., GAMREKELASHVILI, J., KRUGER, C., BACHMANN, O., WESTENDORF, A. M., BUER, J., LIBLAU, R., MANNS, M. P., KORANGY, F. & GRETEN, T. F. 2008. Myeloid-derived suppressor cells in inflammatory bowel disease: a new immunoregulatory pathway. *Gastroenterology*, 135, 871–81, 881 e1–5.
- GUSTAFSSON, C., MJOSBERG, J., MATUSSEK, A., GEFFERS, R., MATTHIESEN, L., BERG, G., SHARMA, S., BUER, J. & ERNERUDH, J. 2008. Gene expression profiling of human decidual macrophages: evidence for immunosuppressive phenotype. *PLoS One*, 3, e2078.
- UKENA, S. N., SINGH, A., DRINGENBERG, U., ENGELHARDT, R., SEIDLER, U., HANSEN, W., BLEICH, A., BRUDER, D., FRANZKE, A., ROGLER, G., SUERBAUM, S., BUER, J., GUNZER, F. & WESTENDORF, A. M. 2007. Probiotic *Escherichia coli* Nissle 1917 inhibits leaky gut by enhancing mucosal integrity. *PLoS One*, 2, e1308.
- STECHE, B., ROBBIANI, R., WALKER, A. W., WESTENDORF, A. M., BARTHEL, M., KREMER, M., CHAFFRON, S., MACPHERSON, A. J., BUER, J., PARKHILL, J., DOUGAN, G., VON MERING, C. & HARDT, W. D. 2007. *Salmonella enterica* serovar typhimurium exploits inflammation to compete with the intestinal microbiota. *PLoS Biol*, 5, 2177–89.
- SCHRADER, A. J., HEGELE, A., OLBERT, P., BUER, J., JERON, A. & HOFMANN, R. 2007. [Application monitoring of the use of sorafenib in papillary renal cell carcinoma]. *Urologe A*, 46, 1291.
- MCMILLAN, D. J., GEFFERS, R., BUER, J., VLAMINCKX, B. J., SRIPRAKASH, K. S. & CHHATWAL, G. S. 2007. Variations in the distribution of genes encoding virulence and extracellular proteins in group A streptococcus are largely restricted to 11 genomic loci. *Microbes Infect*, 9, 259–70.

- MASSE, G. X., CORCUFF, E., DECALUWE, H., BOMMARDT, U., LANTZ, O., BUER, J. & DI SANTO, J. P. 2007. gamma(c) cytokines provide multiple homeostatic signals to naive CD4(+) T cells. *Eur J Immunol*, 37, 2606–16.
- JABLONSKA, J., DITTMAR, K. E., KLEINKE, T., BUER, J. & WEISS, S. 2007. Essential role of CCL2 in clustering of splenic ERTR-9+ macrophages during infection of BALB/c mice by *Listeria monocytogenes*. *Infect Immun*, 75, 462–70.
- HE, F., BUER, J., ZENG, A. P. & BALLING, R. 2007. Dynamic cumulative activity of transcription factors as a mechanism of quantitative gene regulation. *Genome Biol*, 8, R181.
- HANSEN, W., WESTENDORF, A. M., REINWALD, S., BRUDER, D., DEPPENMEIER, S., GROEBE, L., PROBST-KEPPER, M., GRUBER, A. D., GEFFERS, R. & BUER, J. 2007. Chronic antigen stimulation in vivo induces a distinct population of antigen-specific Foxp3 CD25 regulatory T cells. *J Immunol*, 179, 8059–68.
- GEREKE, M., GROEBE, L., PRETTIN, S., KASPER, M., DEPPENMEIER, S., GRUBER, A. D., ENELow, R. I., BUER, J. & BRUDER, D. 2007. Phenotypic alterations in type II alveolar epithelial cells in CD4+ T cell mediated lung inflammation. *Respir Res*, 8, 47.
- CHOUDHURY, A. R., JU, Z., DOJOSUBROTO, M. W., SCHIENKE, A., LEHEL, A., SCHAETZLEIN, S., JIANG, H., STEPCZYNSKA, A., WANG, C., BUER, J., LEE, H. W., VON ZGLINICKI, T., GANSER, A., SCHIRMACHER, P., NAKAUCHI, H. & RUDOLPH, K. L. 2007. Cdkn1a deletion improves stem cell function and lifespan of mice with dysfunctional telomeres without accelerating cancer formation. *Nat Genet*, 39, 99–105.
- BOHN, G., ALLROTH, A., BRANDES, G., THIEL, J., GLOCKER, E., SCHAFFER, A. A., RATHINAM, C., TAUB, N., TEIS, D., ZEIDLER, C., DEWEY, R. A., GEFFERS, R., BUER, J., HUBER, L. A., WELTE, K., GRIMBACHER, B. & KLEIN, C. 2007. A novel human primary immunodeficiency syndrome caused by deficiency of the endosomal adaptor protein p14. *Nat Med*, 13, 38–45.
- WESTENDORF, A. M., FLEISSNER, D., DEPPENMEIER, S., GRUBER, A. D., BRUDER, D., HANSEN, W., LIBLAU, R. & BUER, J. 2006. Autoimmune-mediated intestinal inflammation-impact and regulation of antigen-specific CD8+ T cells. *Gastroenterology*, 131, 510–24.
- WESTENDORF, A. M., BRUDER, D., HANSEN, W. & BUER, J. 2006. Intestinal epithelial antigen induces CD4+ T cells with regulatory phenotype in a transgenic autoimmune mouse model. *Ann N Y Acad Sci*, 1072, 401–6.
- WENDT, K., WILK, E., BUYNY, S., BUER, J., SCHMIDT, R. E. & JACOBS, R. 2006. Gene and protein characteristics reflect functional diversity of CD56dim and CD56bright NK cells. *J Leukoc Biol*, 80, 1529–41.
- VELDMAN, C., PAHL, A., BEISSERT, S., HANSEN, W., BUER, J., DIECKMANN, D., SCHULER, G. & HERTL, M. 2006. Inhibition of the transcription factor Foxp3 converts desmoglein 3-specific type 1 regulatory T cells into Th2-like cells. *J Immunol*, 176, 3215–22.
- TIMMERBEUL, I., GARRETT-ENGELE, C. M., KOSSATZ, U., CHEN, X., FIRPO, E., GRUNWALD, V., KAMINO, K., WILKENS, L., LEHMANN, U., BUER, J., GEFFERS, R., KUBICKA, S., MANNS, M. P., PORTER, P. L., ROBERTS, J. M. & MALEK, N. P. 2006. Testing the importance of p27 degradation by the SCFskp2 pathway in murine models of lung and colon cancer. *Proc Natl Acad Sci U S A*, 103, 14009–14.

- SCHRADER, A. J., VARGA, Z., PFOERTNER, S., GOELDEN, U., BUER, J. & HOFMANN, R. 2006. Treatment targeted at vascular endothelial growth factor: a promising approach to managing metastatic kidney cancer. *BJU Int*, 97, 461–5.
- PFOERTNER, S., JERON, A., PROBST-KEPPER, M., GUZMAN, C. A., HANSEN, W., WESTENDORF, A. M., TOEPFER, T., SCHRADER, A. J., FRANZKE, A., BUER, J. & GEFFERS, R. 2006. Signatures of human regulatory T cells: an encounter with old friends and new players. *Genome Biol*, 7, R54.
- OCKLENBURG, F., MOHARREGH-KHIABANI, D., GEFFERS, R., JANKE, V., PFOERTNER, S., GARRITSEN, H., GROEBE, L., KLEMPNAUER, J., DITTMAR, K. E., WEISS, S., BUER, J. & PROBST-KEPPER, M. 2006. UBD, a downstream element of FOXP3, allows the identification of LGALS3, a new marker of human regulatory T cells. *Lab Invest*, 86, 724–37.
- NALCA, Y., JANSCH, L., BREDEBRUCH, F., GEFFERS, R., BUER, J. & HAUSSLER, S. 2006. Quorum-sensing antagonistic activities of azithromycin in *Pseudomonas aeruginosa* PAO1: a global approach. *Antimicrob Agents Chemother*, 50, 1680–8.
- MCMILLAN, D. J., BEIKO, R. G., GEFFERS, R., BUER, J., SCHOULS, L. M., VLAMINCKX, B. J., WANNET, W. J., SRIPRAKASH, K. S. & CHHATWAL, G. S. 2006. Genes for the majority of group a streptococcal virulence factors and extracellular surface proteins do not confer an increased propensity to cause invasive disease. *Clin Infect Dis*, 43, 884–91.
- KAPS, C., FRAUENSCHUH, S., ENDRES, M., RINGE, J., HAISCH, A., LAUBER, J., BUER, J., KRENN, V., HAUPL, T., BURMESTER, G. R. & SITTINGER, M. 2006. Gene expression profiling of human articular cartilage grafts generated by tissue engineering. *Biomaterials*, 27, 3617–30.
- HANSEN, W., LOSER, K., WESTENDORF, A. M., BRUDER, D., PFOERTNER, S., SIEWERT, C., HUEHN, J., BEISSERT, S. & BUER, J. 2006. G protein-coupled receptor 83 overexpression in naive CD4⁺CD25⁻ T cells leads to the induction of Foxp3⁺ regulatory T cells in vivo. *J Immunol*, 177, 209–15.
- GARBE, A. I., VERMEER, B., GAMREKELASHVILI, J., VON WASIELEWSKI, R., GRETEN, F. R., WESTENDORF, A. M., BUER, J., SCHMID, R. M., MANNS, M. P., KORANGY, F. & GRETEN, T. F. 2006. Genetically induced pancreatic adenocarcinoma is highly immunogenic and causes spontaneous tumor-specific immune responses. *Cancer Res*, 66, 508–16.
- FRITZSCHING, B., OBERLE, N., PAULY, E., GEFFERS, R., BUER, J., POSCHL, J., KRAMMER, P., LINDERKAMP, O. & SURI-PAYER, E. 2006. Naive regulatory T cells: a novel subpopulation defined by resistance toward CD95L-mediated cell death. *Blood*, 108, 3371–8.
- FRANZKE, A., KOENECKE, C., GEFFERS, R., PIAO, W., HUNGER, J. K., GANSER, A. & BUER, J. 2006. Classical Hodgkin's lymphoma: molecular evidence for specific alterations in circulating T lymphocytes. *Tumour Biol*, 27, 329–33.
- FRANZKE, A., HUNGER, J. K., DITTMAR, K. E., GANSER, A. & BUER, J. 2006. Regulatory T-cells in the control of immunological diseases. *Ann Hematol*, 85, 747–58.
- FRANZKE, A., GEFFERS, R., HUNGER, J. K., PFOERTNER, S., PIAO, W., IVANYI, P., GROSSE, J., PROBST-KEPPER, M., GANSER, A. & BUER, J. 2006. Identification of novel regulators in T-cell differentiation of aplastic anemia patients. *BMC Genomics*, 7, 263.

- DE BUHR, M. F., MAHLER, M., GEFFERS, R., HANSEN, W., WESTENDORF, A. M., LAUBER, J., BUER, J., SCHLEGELBERGER, B., HEDRICH, H. J. & BLEICH, A. 2006. Cd14, Gbp1, and Pla2g2a: three major candidate genes for experimental IBD identified by combining QTL and microarray analyses. *Physiol Genomics*, 25, 426–34.
- BREDENBRUCH, F., GEFFERS, R., NIMTZ, M., BUER, J. & HAUSSLER, S. 2006. The *Pseudomonas aeruginosa* quinolone signal (PQS) has an iron-chelating activity. *Environ Microbiol*, 8, 1318–29.
- BLUMENTHAL, A., EHLERS, S., LAUBER, J., BUER, J., LANGE, C., GOLDMANN, T., HEINE, H., BRANDT, E. & REILING, N. 2006. The Wingless homolog WNT5A and its receptor Frizzled-5 regulate inflammatory responses of human mononuclear cells induced by microbial stimulation. *Blood*, 108, 965–73.
- WIEMANN, S. U., SATYANARAYANA, A., BUER, J., KAMINO, K., MANNS, M. P. & RUDOLPH, K. L. 2005. Contrasting effects of telomere shortening on organ homeostasis, tumor suppression, and survival during chronic liver damage. *Oncogene*, 24, 1501–9.
- WESTENDORF, A. M., TEMPLIN, M., GEFFERS, R., DEPPENMEIER, S., GRUBER, A. D., PROBST-KEPPER, M., HANSEN, W., LIBLAU, R. S., GUNZER, F., BRUDER, D. & BUER, J. 2005. CD4+ T cell mediated intestinal immunity: chronic inflammation versus immune regulation. *Gut*, 54, 60–9.
- WESTENDORF, A. M., GUNZER, F., DEPPENMEIER, S., TAPADAR, D., HUNGER, J. K., SCHMIDT, M. A., BUER, J. & BRUDER, D. 2005. Intestinal immunity of *Escherichia coli* NISSLE 1917: a safe carrier for therapeutic molecules. *FEMS Immunol Med Microbiol*, 43, 373–84.
- UKENA, S. N., WESTENDORF, A. M., HANSEN, W., ROHDE, M., GEFFERS, R., COLDEWEY, S., SUERBAUM, S., BUER, J. & GUNZER, F. 2005. The host response to the probiotic *Escherichia coli* strain Nissle 1917: specific up-regulation of the proinflammatory chemokine MCP-1. *BMC Med Genet*, 6, 43.
- SUN, J., GUNZER, F., WESTENDORF, A. M., BUER, J., SCHARFE, M., JAREK, M., GOSSLING, F., BLOCKER, H. & ZENG, A. P. 2005. Genomic peculiarity of coding sequences and metabolic potential of probiotic *Escherichia coli* strain Nissle 1917 inferred from raw genome data. *J Biotechnol*, 117, 147–61.
- SALUNKHE, P., TOPFER, T., BUER, J. & TUMMLER, B. 2005. Genome-wide transcriptional profiling of the steady-state response of *Pseudomonas aeruginosa* to hydrogen peroxide. *J Bacteriol*, 187, 2565–72.
- RHARBAOUI, F., BRUDER, D., VIDAKOVIC, M., EBENSEN, T., BUER, J. & GUZMAN, C. A. 2005. Characterization of a B220+ lymphoid cell subpopulation with immune modulatory functions in nasal-associated lymphoid tissues. *J Immunol*, 174, 1317–24.
- RATHINAM, C., GEFFERS, R., YUCEL, R., BUER, J., WELTE, K., MOROY, T. & KLEIN, C. 2005. The transcriptional repressor Gfi1 controls STAT3-dependent dendritic cell development and function. *Immunity*, 22, 717–28.
- PRIEBE-RICHTER, C., IVANYI, P., BUER, J., LANGER, F., LOTZ, J., HERTENSTEIN, B., GANSER, A. & FRANZKE, A. 2005. Inflammatory pseudotumor of the lung following invasive aspergillosis in a patient with chronic graft-vs.-host disease. *Eur J Haematol*, 75, 68–72.
- PFOERTNER, S., GOELDEN, U., HANSEN, W., TOEPFER, T., GEFFERS, R., UKENA, S. N., VON KNOBLOCH, R., HOFMANN, R., BUER, J. & SCHRADER, A. J. 2005. Cellular

- retinoic acid binding protein I: expression and functional influence in renal cell carcinoma. *Tumour Biol*, 26, 313–23.
- MATUSSEK, A., STRINDHALL, J., STARK, L., ROHDE, M., GEFFERS, R., BUER, J., KIHLMSTROM, E., LINDGREN, P. E. & LOFGREN, S. 2005. Infection of human endothelial cells with *Staphylococcus aureus* induces transcription of genes encoding an innate immunity response. *Scand J Immunol*, 61, 536–44.
- LOSER, K., HANSEN, W., APELT, J., BALKOW, S., BUER, J. & BEISSERT, S. 2005. In vitro-generated regulatory T cells induced by Foxp3-retrovirus infection control murine contact allergy and systemic autoimmunity. *Gene Ther*, 12, 1294–304.
- LECHEL, A., SATYANARAYANA, A., JU, Z., PLENTZ, R. R., SCHAEZLEIN, S., RUDOLPH, C., WILKENS, L., WIEMANN, S. U., SARETZKI, G., MALEK, N. P., MANNS, M. P., BUER, J. & RUDOLPH, K. L. 2005. The cellular level of telomere dysfunction determines induction of senescence or apoptosis in vivo. *EMBO Rep*, 6, 275–81.
- JUHAS, M., WIEHLMANN, L., SALUNKHE, P., LAUBER, J., BUER, J. & TUMMLER, B. 2005. GeneChip expression analysis of the VqsR regulon of *Pseudomonas aeruginosa* TB. *FEMS Microbiol Lett*, 242, 287–95.
- GOELDEN, U., UKENA, S. N., PFOERTNER, S., HOFMANN, R., BUER, J. & SCHRADER, A. J. 2005. RAR-beta(1) overexpression in chromophobe renal cell carcinoma: a novel target for therapeutic intervention? *Exp Oncol*, 27, 220–4.
- GOELDEN, U., PFOERTNER, S., HANSEN, W., TOEPFER, T., VON KNOBLOCH, R., HOFMANN, R., BUER, J. & SCHRADER, A. J. 2005. Expression and functional influence of cellular retinoic acid-binding protein II in renal cell carcinoma. *Urol Int*, 75, 269–76.
- BUER, J., WESTENDORF, A. M., ZENG, A. P., HE, F., HANSEN, W. & PROBST-KEPPER, M. 2005. Mechanisms of central and peripheral T-cell tolerance: An update. *Transfusion Medicine and Hemotherapy*, 32, 384–399.
- BRUDER, D., WESTENDORF, A. M., HANSEN, W., PRETTIN, S., GRUBER, A. D., QIAN, Y., VON BOEHMER, H., MAHNKE, K. & BUER, J. 2005. On the edge of autoimmunity: T-cell stimulation by steady-state dendritic cells prevents autoimmune diabetes. *Diabetes*, 54, 3395–401.
- BLUMENTHAL, A., LAUBER, J., HOFFMANN, R., ERNST, M., KELLER, C., BUER, J., EHLERS, S. & REILING, N. 2005. Common and unique gene expression signatures of human macrophages in response to four strains of *Mycobacterium avium* that differ in their growth and persistence characteristics. *Infect Immun*, 73, 3330–41.
- WALTER, U., SCHERBAUM, W. A., WALTER, U. & BUER, J. 2004. MHC class II expression by beta cells in Type 1 diabetes: promoting or inhibiting the autoimmune process? A reply to D. W. R. Gray. *Diabetologia*, 47, 1641–2.
- VON GOTZ, F., HAUSSLER, S., JORDAN, D., SARAVANAMUTHU, S. S., WEHMHONER, D., STRUSSMANN, A., LAUBER, J., ATTREE, I., BUER, J., TUMMLER, B. & STEINMETZ, I. 2004. Expression analysis of a highly adherent and cytotoxic small colony variant of *Pseudomonas aeruginosa* isolated from a lung of a patient with cystic fibrosis. *J Bacteriol*, 186, 3837–47.
- SCHRADER, A. J., VON KNOBLOCH, R., HEIDENREICH, A., BUER, J. & HOFMANN, R. 2004. Application of retinoids in the treatment of renal cell carcinoma--a futile effort? *Anticancer Drugs*, 15, 819–24.

- SATYANARAYANA, A., GREENBERG, R. A., SCHAEZLEIN, S., BUER, J., MASUTOMI, K., HAHN, W. C., ZIMMERMANN, S., MARTENS, U., MANNS, M. P. & RUDOLPH, K. L. 2004. Mitogen stimulation cooperates with telomere shortening to activate DNA damage responses and senescence signaling. *Mol Cell Biol*, 24, 5459–74.
- SATYANARAYANA, A., GEFFERS, R., MANNS, M. P., BUER, J. & RUDOLPH, K. L. 2004. Gene expression profile at the G1/S transition of liver regeneration after partial hepatectomy in mice. *Cell Cycle*, 3, 1405–17.
- SARAVANAMUTHU, S. S., VON GOTZ, F., SALUNKHE, P., CHOZHAVENDAN, R., GEFFERS, R., BUER, J., TUMMLER, B. & STEINMETZ, I. 2004. Evidence for polyadenylated mRNA in *Pseudomonas aeruginosa*. *J Bacteriol*, 186, 7015–8.
- RHARBAOUI, F., WESTENDORF, A., LINK, C., FELK, S., BUER, J., GUNZER, M. & GUZMAN, C. A. 2004. The Mycoplasma-derived macrophage-activating 2-kilodalton lipopeptide triggers global immune activation on nasal mucosa-associated lymphoid tissues. *Infect Immun*, 72, 6978–86.
- MA, H. W., KUMAR, B., DITGES, U., GUNZER, F., BUER, J. & ZENG, A. P. 2004. An extended transcriptional regulatory network of *Escherichia coli* and analysis of its hierarchical structure and network motifs. *Nucleic Acids Res*, 32, 6643–9.
- MA, H. W., BUER, J. & ZENG, A. P. 2004. Hierarchical structure and modules in the *Escherichia coli* transcriptional regulatory network revealed by a new top-down approach. *BMC Bioinformatics*, 5, 199.
- KOSSATZ, U., DIETRICH, N., ZENDER, L., BUER, J., MANNS, M. P. & MALEK, N. P. 2004. Skp2-dependent degradation of p27kip1 is essential for cell cycle progression. *Genes Dev*, 18, 2602–7.
- KELLER, C., LAUBER, J., BLUMENTHAL, A., BUER, J. & EHLERS, S. 2004. Resistance and susceptibility to tuberculosis analysed at the transcriptome level: lessons from mouse macrophages. *Tuberculosis (Edinb)*, 84, 144–58.
- HUEHN, J., SIEGMUND, K., LEHMANN, J. C., SIEWERT, C., HAUBOLD, U., FEUERER, M., DEBES, G. F., LAUBER, J., FREY, O., PRZYBYLSKI, G. K., NIESNER, U., DE LA ROSA, M., SCHMIDT, C. A., BRAUER, R., BUER, J., SCHEFFOLD, A. & HAMANN, A. 2004. Developmental stage, phenotype, and migration distinguish naive- and effector/memory-like CD4⁺ regulatory T cells. *J Exp Med*, 199, 303–13.
- HANSEN, W. & BUER, J. 2004. Role of regulatory T cells for the outcome of allo- and autoimmune responses. *Transfusion Medicine and Hemotherapy*, 31, 322–331.
- ESCHBACH, M., SCHREIBER, K., TRUNK, K., BUER, J., JAHN, D. & SCHOBERT, M. 2004. Long-term anaerobic survival of the opportunistic pathogen *Pseudomonas aeruginosa* via pyruvate fermentation. *J Bacteriol*, 186, 4596–604.
- BRUDER, D., WESTENDORF, A. M., GEFFERS, R., GRUBER, A. D., GEREKE, M., ENELOW, R. I. & BUER, J. 2004. CD4 T Lymphocyte-mediated lung disease: steady state between pathological and tolerogenic immune reactions. *Am J Respir Crit Care Med*, 170, 1145–52.
- BRUDER, D., PROBST-KEPPER, M., WESTENDORF, A. M., GEFFERS, R., BEISSERT, S., LOSER, K., VON BOEHMER, H., BUER, J. & HANSEN, W. 2004. Neuropilin-1: a surface marker of regulatory T cells. *Eur J Immunol*, 34, 623–630.
- BOHN, E., MULLER, S., LAUBER, J., GEFFERS, R., SPEER, N., SPIETH, C., KREJCI, J., MANNCKE, B., BUER, J., ZELL, A. & AUTENRIETH, I. B. 2004. Gene expression

- patterns of epithelial cells modulated by pathogenicity factors of *Yersinia enterocolitica*. *Cell Microbiol*, 6, 129–41.
- WUESTEFELD, T., KLEIN, C., STREETZ, K. L., BETZ, U., LAUBER, J., BUER, J., MANNS, M. P., MULLER, W. & TRAUTWEIN, C. 2003. Interleukin-6/glycoprotein 130-dependent pathways are protective during liver regeneration. *J Biol Chem*, 278, 11281–8.
- WALTER, U., TOEPFER, T., DITTMAR, K. E., KRETSCHMER, K., LAUBER, J., WEISS, S., SERVOS, G., LECHNER, O., SCHERBAUM, W. A., BORNSTEIN, S. R., VON BOEHMER, H. & BUER, J. 2003. Pancreatic NOD beta cells express MHC class II protein and the frequency of I-A(g7) mRNA-expressing beta cells strongly increases during progression to autoimmune diabetes. *Diabetologia*, 46, 1106–14.
- SCHRADER, A. J., LAUBER, J., LECHNER, O., HEIDENREICH, A., HOFMANN, R. & BUER, J. 2003. Application of real-time reverse transcriptase-polymerase chain reaction in urological oncology. *J Urol*, 169, 1858–64.
- SATYANARAYANA, A., WIEMANN, S. U., BUER, J., LAUBER, J., DITTMAR, K. E., WUSTEFELD, T., BLASCO, M. A., MANNS, M. P. & RUDOLPH, K. L. 2003. Telomere shortening impairs organ regeneration by inhibiting cell cycle re-entry of a subpopulation of cells. *EMBO J*, 22, 4003–13.
- SAMSON, S. I., RICHARD, O., TAVIAN, M., RANSON, T., VOSSHENRICH, C. A., COLUCCI, F., BUER, J., GROSVELD, F., GODIN, I. & DI SANTO, J. P. 2003. GATA-3 promotes maturation, IFN-gamma production, and liver-specific homing of NK cells. *Immunity*, 19, 701–11.
- PULZ, M., MATUSSEK, A., MONAZAHIAN, M., TITTEL, A., NIKOLIC, E., HARTMANN, M., BELLIN, T., BUER, J. & GUNZER, F. 2003. Comparison of a shiga toxin enzyme-linked immunosorbent assay and two types of PCR for detection of shiga toxin-producing *Escherichia coli* in human stool specimens. *J Clin Microbiol*, 41, 4671–5.
- MATUSSEK, A., LAUBER, J., BERGAU, A., HANSEN, W., ROHDE, M., DITTMAR, K. E., GUNZER, M., MENGEL, M., GATZLAFF, P., HARTMANN, M., BUER, J. & GUNZER, F. 2003. Molecular and functional analysis of Shiga toxin-induced response patterns in human vascular endothelial cells. *Blood*, 102, 1323–32.
- FRANZKE, A., PIAO, W., LAUBER, J., GATZLAFF, P., KONECKE, C., HANSEN, W., SCHMITT-THOMSEN, A., HERTENSTEIN, B., BUER, J. & GANSER, A. 2003. G-CSF as immune regulator in T cells expressing the G-CSF receptor: implications for transplantation and autoimmune diseases. *Blood*, 102, 734–9.
- BUER, J. & BALLING, R. 2003. Mice, microbes and models of infection. *Nat Rev Genet*, 4, 195–205.
- SECHI, A. S., BUER, J., WEHLAND, J. & PROBST-KEPPER, M. 2002. Changes in actin dynamics at the T-cell/APC interface: implications for T-cell anergy? *Immunol Rev*, 189, 98–110.
- SCHRADER, A. J., LECHNER, O., TEMPLIN, M., DITTMAR, K. E., MACHTENS, S., MENGEL, M., PROBST-KEPPER, M., FRANZKE, A., WOLLENSAK, T., GATZLAFF, P., ATZPODIEN, J., BUER, J. & LAUBER, J. 2002. CXCR4/CXCL12 expression and signalling in kidney cancer. *Br J Cancer*, 86, 1250–6.
- SALUNKHE, P., VON GÖTZ, F., WIEHLMANN, L., LAUBER, J., BUER, J. & TüMMLER, B. 2002. GeneChip expression analysis of the response of *Pseudomonas aeruginosa* to Paraquat-induced superoxide stress. *Genome Letters*, 4, 165–174.

- LECHNER, O., BRUDER, D., LAUBER, J. & BUER, J. 2002. Anergic T-Zellen: Immunregulatoren für die Klinik. *Die gelben Hefte*, 42, 17–26.
- GARRITSEN, H. S. P., MACKE, L., LAUBER, J., BUER, J., PÄGELOW, U., ROHDE, M., HANNIG, H., PIES, A., WÖRMANN, B., LINDENMAIER, W. & DITTMAR, K. E. J. 2002. Genetically modified dendritic cells expressing two melanoma specific antigens simultaneously. *Transfusion*, 42, 50s–50s.
- EHLERS, S., LEHMANN, J., MÜLLER, K., LASKAY, T., BUER, J. & LAUBER, J. 2002. Measuring immune responses. *Immunology of Infection, Second Edition*, 32, 403–431.
- LECHNER, O., LAUBER, J., FRANZKE, A., SARUKHAN, A., VON BOEHMER, H. & BUER, J. 2001. Fingerprints of anergic T cells. *Curr Biol*, 11, 587–95.
- HESS, S., RHEINHEIMER, C., TIDOW, F., BARTLING, G., KAPS, C., LAUBER, J., BUER, J. & KLOS, A. 2001. The reprogrammed host: Chlamydia trachomatis-induced up-regulation of glycoprotein 130 cytokines, transcription factors, and antiapoptotic genes. *Arthritis Rheum*, 44, 2392–401.
- FRANZKE, A., BUER, J., PROBST-KEPPER, M., LINDIG, C., FRAMZLE, M., SCHRADER, A. J., GANSER, A. & ATZPODIEN, J. 2001. HLA phenotype and cytokine-induced tumor control in advanced renal cell cancer. *Cancer Biother Radiopharm*, 16, 401–9.
- FELSKE, A., PAULING, B. V., VON CANSTEIN, H. F., LI, Y., LAUBER, J., BUER, J. & WAGNER-DOBLER, I. 2001. Detection of small sequence differences using competitive PCR: molecular monitoring of genetically improved, mercury-reducing bacteria. *Biotechniques*, 30, 142–8.
- WALTER, U., FRANZKE, A., SARUKHAN, A., ZOBEL, C., VON BOEHMER, H., BUER, J. & LECHNER, O. 2000. Monitoring gene expression of TNFR family members by beta-cells during development of autoimmune diabetes. *Eur J Immunol*, 30, 1224–32.
- SCHRADER, A. J., PROBST-KEPPER, M., GROSSE, J., KUNTER, U., SCHENK, F., FRANZKE, A., ATZPODIEN, J. & BUER, J. 2000. Molecular and prognostic classification of advanced melanoma: a multi-marker microcontamination assay of peripheral blood stem cells. *Melanoma Res*, 10, 355–62.
- SCHRADER, A. J., PROBST-KEPPER, M., GROSSE, J., KUNTER, U., FRANZKE, A., SEL, S., ATZPODIEN, E. & BUER, J. 2000. Tumour microdissemination and survival in metastatic melanoma. *Anticancer Res*, 20, 3619–24.
- OEVERMANN, K., BUER, J., HOFFMANN, R., FRANZKE, A., SCHRADER, A., PATZELT, T., KIRCHNER, H. & ATZPODIEN, J. 2000. Capecitabine in the treatment of metastatic renal cell carcinoma. *Br J Cancer*, 83, 583–7.
- WITTKKE, F., HOFFMANN, R., BUER, J., DALLMANN, I., OEVERMANN, K., SEL, S., WANDERT, T., GANSER, A. & ATZPODIEN, J. 1999. Interleukin 10 (IL-10): an immunosuppressive factor and independent predictor in patients with metastatic renal cell carcinoma. *Br J Cancer*, 79, 1182–4.
- VON BOEHMER, H., AIFANTIS, I., FEINBERG, J., LECHNER, O., SAINT-RUF, C., WALTER, U., BUER, J. & AZOGUI, O. 1999. Pleiotropic changes controlled by the pre-T-cell receptor. *Curr Opin Immunol*, 11, 135–42.
- HOFFMANN, R., FRANZKE, A., BUER, J., SEL, S., OEVERMANN, K., DUENSING, A., PROBST, M., DUENSING, S., KIRCHNER, H., GANSER, A. & ATZPODIEN, J. 1999. Prognostic impact of in vivo soluble cell adhesion molecules in metastatic renal cell carcinoma. *Br J Cancer*, 79, 1742–5.

- FRANZKE, A., PEEST, D., PROBST-KEPPER, M., BUER, J., KIRCHNER, G. I., BRABANT, G., KIRCHNER, H., GANSER, A. & ATZPODIEN, J. 1999. Autoimmunity resulting from cytokine treatment predicts long-term survival in patients with metastatic renal cell cancer. *J Clin Oncol*, 17, 529–33.
- ATZPODIEN, J., BUER, J., SEL, S., JANSSEN, J. & OEVERMANN, K. 1999. [Chemoimmunotherapy in the systemic treatment of advanced renal carcinoma]. *Urologe A*, 38, 474–8.
- VON BOEHMER, H., AIFANTIS, I., AZOGUI, O., FEINBERG, J., SAINT-RUF, C., ZOBBER, C., GARCIA, C. & BUER, J. 1998. Crucial function of the pre-T-cell receptor (TCR) in TCR beta selection, TCR beta allelic exclusion and alpha beta versus gamma delta lineage commitment. *Immunol Rev*, 165, 111–9.
- SARUKHAN, A., LANOUE, A., FRANZKE, A., BROUSSE, N., BUER, J. & VON BOEHMER, H. 1998. Changes in function of antigen-specific lymphocytes correlating with progression towards diabetes in a transgenic model. *EMBO J*, 17, 71–80.
- KIRCHNER, G. I., FRANZKE, A., BUER, J., BEIL, W., PROBST-KEPPER, M., WITTKKE, F., OEVERMANN, K., LASSMANN, S., HOFFMANN, R., KIRCHNER, H., GANSER, A. & ATZPODIEN, J. 1998. Pharmacokinetics of recombinant human interleukin-2 in advanced renal cell carcinoma patients following subcutaneous application. *Br J Clin Pharmacol*, 46, 5–10.
- HOFFMANN, R., MULLER, I., NEUBER, K., LASSMANN, S., BUER, J., PROBST, M., OEVERMANN, K., FRANZKE, A., KIRCHNER, H., GANSER, A. & ATZPODIEN, J. 1998. Risk and outcome in metastatic malignant melanoma patients receiving DTIC, cisplatin, BCNU and tamoxifen followed by immunotherapy with interleukin 2 and interferon alpha2a. *Br J Cancer*, 78, 1076–80.
- FRANZKE, A., PROBST-KEPPER, M., BUER, J., DUENSING, S., HOFFMANN, R., WITTKKE, F., VOLKENANDT, M., GANSER, A. & ATZPODIEN, J. 1998. Elevated pretreatment serum levels of soluble vascular cell adhesion molecule 1 and lactate dehydrogenase as predictors of survival in cutaneous metastatic malignant melanoma. *Br J Cancer*, 78, 40–5.
- BUER, J., LANOUE, A., FRANZKE, A., GARCIA, C., VON BOEHMER, H. & SARUKHAN, A. 1998. Interleukin 10 secretion and impaired effector function of major histocompatibility complex class II-restricted T cells anergized in vivo. *J Exp Med*, 187, 177–83.
- AIFANTIS, I., AZOGUI, O., FEINBERG, J., SAINT-RUF, C., BUER, J. & VON BOEHMER, H. 1998. On the role of the pre-T cell receptor in alphabeta versus gammadelta T lineage commitment. *Immunity*, 9, 649–55.
- PROBST-KEPPER, M., SCHRADER, A., BUER, J., GROSSE, J., VOLKENANDT, M., ILLIGER, H. J., METZNER, B., KADAR, J., DUENSING, S., HERTENSTEIN, B., GANSER, A. & ATZPODIEN, J. 1997. Detection of melanoma cells in peripheral blood stem cell harvests of patients with progressive metastatic malignant melanoma. *Br J Haematol*, 98, 488–90.
- BUER, J., PROBST, M., FRANZKE, A., DUENSING, S., HAINDL, J., VOLKENANDT, M., WITTKKE, F., HOFFMANN, R., GANSER, A. & ATZPODIEN, J. 1997. Elevated serum levels of S100 and survival in metastatic malignant melanoma. *Br J Cancer*, 75, 1373–6.
- BUER, J., PROBST, M., DUENSING, S., KODITZ, H., FRANZKE, A., DALLMANN, I., GANSER, A. & ATZPODIEN, J. 1997. Clinical and in vitro response to 13-cis-retinoic acid in interferon-alpha resistant renal cell carcinoma. *Cancer Biother Radiopharm*, 12, 143–7.

- BUER, J., AIFANTIS, I., DISANTO, J. P., FEHLING, H. J. & VON BOEHMER, H. 1997. T-cell development in the absence of the pre-T-cell receptor. *Immunol Lett*, 57, 5–8.
- BUER, J., AIFANTIS, I., DISANTO, J. P., FEHLING, H. J. & VON BOEHMER, H. 1997. Role of different T cell receptors in the development of pre-T cells. *J Exp Med*, 185, 1541–7.
- AIFANTIS, I., BUER, J., VON BOEHMER, H. & AZOGUI, O. 1997. Essential role of the pre-T cell receptor in allelic exclusion of the T cell receptor beta locus. *Immunity*, 7, 601–7.
- KUNTER, U., BUER, J., PROBST, M., DUENSING, S., DALLMANN, I., GROSSE, J., KIRCHNER, H., SCHLUEPEN, E. M., VOLKENANDT, M., GANSER, A. & ATZPODIEN, J. 1996. Peripheral blood tyrosinase messenger RNA detection and survival in malignant melanoma. *J Natl Cancer Inst*, 88, 590–4.
- DUENSING, S., VAN DEN BERG-DE RUITER, E., STORKEL, S., KIRCHNER, H., HANNINEN, E. L., BUER, J., POLIWODA, H. & ATZPODIEN, J. 1996. Cytogenetic studies in renal cell carcinoma patients receiving low-dose recombinant interleukin-2-based immunotherapy. *Tumour Biol*, 17, 27–33.
- DUENSING, S., BREVIS NUNEZ, F., MEYER, N., ANASTASSIOU, G., NASAREK, A., GROSSE, J., BUER, J., PROBST, M., GANSER, A. & ALZPODIEN, J. 1996. Exposure to vinblastine modulates beta 1 integrin expression and in vitro binding to extracellular matrix molecules in a human renal carcinoma cell line. *Invasion Metastasis*, 16, 65–72.
- DECKERT, M., FRANZKE, A., BUER, J., PROBST, M., DUENSING, S., LOPEZ-HAENNINEN, E., KIRCHNER, H., POLIWODA, H. & ATZPODIEN, J. 1996. Linomide and interleukin-2 in patients with advanced renal cell carcinoma. *Cancer Biother Radiopharm*, 11, 319–24.
- PROBST, M., BUER, J. & ATZPODIEN, J. 1995. Genetic abnormalities during transition from Helicobacter-pylori-associated gastritis to low-grade MALToma. *Lancet*, 345, 723–4.
- MEFFERT, M., SCHOMBURG, A., HANNINEN, E. L., MENZEL, T., VOCKE, S., DALLMANN, I., GROSSE, J., DUENSING, S., BUER, J., KIRCHNER, H. & ET AL. 1995. In vivo tumor necrosis factor-alpha as indicator of biologic and clinical response to low-dose SC recombinant interleukin 2. *Anticancer Res*, 15, 127–32.
- BUER, J., PROBST, M., GANSER, A. & ATZPODIEN, J. 1995. Response to 13-cis-retinoic acid plus interferon alfa-2a in two patients with therapy-refractory advanced renal cell carcinoma. *J Clin Oncol*, 13, 2679–80.
- BUER, J., PROBST, M. & ATZPODIEN, J. 1995. Molecular diagnosis of neoplasms. *N Engl J Med*, 333, 193–4.
- BUER, J., HILSE, R., DALLMANN, I., GROSSE, J., KIRCHNER, H., ZORN, U., HANNINEN, E. L., FRANZKE, A., DUENSING, S., POLIWODA, H. & ET AL. 1995. Lymphocyte-conditioned medium in combination with interleukin-2 effectively induces antitumour autoimmunity by adoptive transfer of short activated killer (SHAK) cells. *Cytokines Mol Ther*, 1, 39–46.
- ATZPODIEN, J., KIRCHNER, H., DUENSING, S., LOPEZ HANNINEN, E., FRANZKE, A., BUER, J., PROBST, M., ANTON, P. & POLIWODA, H. 1995. Biochemotherapy of advanced metastatic renal-cell carcinoma: results of the combination of interleukin-2, alpha-interferon, 5-fluorouracil, vinblastine, and 13-cis-retinoic acid. *World J Urol*, 13, 174–7.
- MEFFERT, M., HANNINEN, E. L., MENZEL, T., SCHOMBURG, A., DUENSING, S., DALLMANN, I., GROSSE, J., VOCKE, S., BUER, J., DECKERT, M. & ET AL. 1994. In vivo time and dose dependency of interleukin-6 secretion in response to low-dose subcutaneous recombinant interleukin-2. *Cancer Biother*, 9, 307–16.

- KOCH, O. M., VOLKENANDT, M., GOKER, E., BUER, J., PROBST, M., BANERJEE, D., DANENBERG, P. V. & BERTINO, J. R. 1994. Molecular detection and characterization of clonal cell populations in acute lymphocytic leukemia by analysis of conformational polymorphisms of cRNA molecules of rearranged T-cell-receptor-gamma and immunoglobulin heavy-chain genes. *Leukemia*, 8, 946–52.
- KOCH, O. M., PROBST, M., TIEMANN, M., JAKOB, I., VOLKENANDT, M., WIENECKE, R., BUER, J., ATZPODIEN, J., LENZ, H. J., DANENBERG, P. V. & ET AL. 1994. Detection of clonal T-cell populations in gastrointestinal lymphomas by analysis of cRNA conformational polymorphisms of rearranged T-cell-receptor-gamma genes. *Br J Haematol*, 86, 316–21.
- DUENSING, S., DALLMANN, I., GROSSE, J., BUER, J., LOPEZ HANNINEN, E., DECKERT, M., STORKEL, S., KIRCHNER, H., POLIWODA, H. & ATZPODIEN, J. 1994. Immunocytochemical detection of P-glycoprotein: initial expression correlates with survival in renal cell carcinoma patients. *Oncology*, 51, 309–13.
- BUER, J., KIRCHNER, H., SCHOMBURG, A., SCHULER, A., MANNS, M., LOPEZ-HANNINEN, E., DUENSING, S., POLIWODA, H. & ATZPODIEN, J. 1994. Cytokine-based biotherapy of gastrointestinal tumors. *Clin Investig*, 72, 526–34.
- VOLKENANDT, M., WIENECKE, R., KOCH, O. M., BUER, J., PROBST, M., ATZPODIEN, J., HORIKOSHI, T., DANENBERG, K., DANENBERG, P. & BERTINO, J. R. 1993. Conformational polymorphisms of cRNA of T-cell-receptor genes as a clone-specific molecular marker for cutaneous lymphoma. *J Invest Dermatol*, 101, 514–6.