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Scientific Articles

Ofatumumab

Lindorfer, M.A., J. Bakker, P.W.H.I. Parren and R.P. Taylor. Ofatumumab: a next-generation human therapeutic CD20 antibody with potent complement-dependent cytotoxicity. **Handbook of Therapeutic Antibodies**. S. Dübel and J.M. Reichert eds. Wiley-VCH Weinberg, Germany. Ch63; p1733-1774.

Sorensen P.S., S. Lisby, R. Grove, F. Derosier, S. Shackelford, E. Havrdova, j. Drulovic and M. Filippi. Safety and Efficacy of Ofatumumab in Relapsing-remitting Multiple Sclerosis: A Phase 2 study. **Neurology**. 2014; 82(7): 573-581.

Ogawa, Y., M. Ogura, T. Suzuki, K. Ando, T. Uchida, Y. Shirasugi, K. Tobinai, J.H. Lee, M. Kase, K. Katsura and T. Hotta. A phase I/II study of ofatumumab (GSK1841157) in Japanese and Korean patients with relapsed or refractory B-cell chronic lymphocytic leukemia. **Int. J. Hematol.** 2013; 98(2): 164-70.

Ogura M., K. Hatake, K. Tobinai, T. Uchida, T. Suzuki, Y. Terui, M. Yokoyama, D. Maruyama, M. Mori, R.C. Jewell, K. Katsura and T. Hotta. Phase I study of ofatumumab, a human anti-CD20 antibody, in Japanese patients with relapsed or refractory chronic lymphocytic leukemia and small lymphocytic lymphoma. **Jpn. J. Clin. Oncol.** 2013; 43(5), 466-75.

Coiffier, B., J. Radford, A. Bosly, G. Martinelli, G. Barca, A. Davies, D. Decaudin, E. Gallop-Evans, S. Padmanabhan-Iyer, K. van Eygen, Ka Lung Wu, I.V.Gupta, T.S. Lin, N. Goldstein, R.C. Jewell, P. Winter and S. Lisby. A multicentre, phase II trial of ofatumumab monotherapy in relapsed/progressive diffuse large B-cell lymphoma. **Br. J. Haematol.** 2013; 163(3), 334-342.

Matasar, M.J., M.S. Czuczman, M.A. Rodriguez, M. Fennessy, T.C. Shea, G. Spitzer, I.S. Lossos, M.A. Kharfan-Dabaja, R. Joyce, L. Fayad, K. Henkel, Q. Liao, K. Edvardsen, R.C. Jewell, D. Fecteau, R.P. Singh, S. Lisby and C.H. Moskowitz. Ofatumumab in combination with ICE or DHAP chemotherapy in relapsed or refractory intermediate grade B-cell lymphoma. **Blood**. 2013; 122(4), 499-506.

Tolley K., C. Goad, Y. Yi, P. Maroudas, A. Haiderali and G. Thompson. Utility elicitation study in the UK general public for late-stage chronic lymphocytic leukaemia. **Eur. J. Health Econ.** 2013; 14(5), 749-59.

Czuczman, M.S., L. Fayad, V. Delwail, G. Carton, E. Jacobsen, K. Kullickowski, B.K. Link, L. Pinter-Brown, J. Radford, A. Hellmann, E. Gallop-Evans, C.G. DiRienzo, N. Goldstein, I. Gupta, R.C. Jewell, T.S. Lin, S. Lisby, M. Schultz, C.A. Russel, A. Hagenbeek. Ofatumumab monotherapy in rituximab-refractory follicular lymphoma: results from multicenter study. **Blood**. 2012; 119(16): 3698-3704.

Czuczman, M.S., G. Hess, O.V. Gadeberg, L.M. Pedersen, N. Golstein, I. Gupta, R.C. Jewell, T.S. Lin, S. Lisby, C. Strange, K. Windfeld, A. Viardot. Chemoimmunotherapy with ofatumumab in combination with CHOP in previously untreated follicular lymphoma. **British Journal of Haematology**. 2012; 157(4): 438-445.

Beurskens, F.J., M.A. Lindorfer, M. Farooqui, P.V. Beum, P. Engelberts, W.J.M. Mackus, P.W.H.I. Parren, A. Wiestner, R.P.Taylor. Exhaustion of cytotoxic effector systems may limit monoclonal antibody-based immunotherapy in cancer patients. **The Journal of Immunology**. 2012; 188(7): 3532-3541.

Baig, N.A., R.P. Taylor, M.A. Lindorfer, A.K. Church, B.R. Laplant, E.S. Pavey, G.S. Nowakowski, C.S. Zent. Complement dependent cytotoxicity (CDC) in chronic lymphocytic leukemia (CLL): Ofatumumab enhances alemtuzumab CDC and reveals cells resistant to activated complement. **Leukemia and Lymphoma**. 2012; 53(11): 2218-2227.

Barth, M.J., F.J. Hernandez-Ilizaliturri, C. Mavis, P.C. Tsai, J.F. Gibbs, G. Deeb, M.S. Czuczman. Ofatumumab demonstrates activity against rituximab-sensitive and -resistant cell lines, lymphoma xenografts and primary tumour cells from patients with B-cell lymphoma. **Br J Haematol**. 2012 Feb;156(4):490-8.

Boross P, Jansen JH, de Haij S, Beurskens FJ, van der Poel CE, Bevaart L, Nederend M, Golay J, van de Winkel JG, Parren PW, Leusen JH. The in vivo mechanism of action of CD20 monoclonal antibodies depends on local tumor burden. **Hematologica**. 2011 Dec;96(12):1822-30.

Beum, P.V., M.A. Lindorfer, E.M. Peek, P. T. Stukenberg, M. de Weers, F.J. Beurskens, P.W.H.I. Parren, J.G.J. van de Winkel, and R.P. Taylor. Penetration of antibody-opsonized cells by the membrane attack complex of complement promotes calcium influx and induces streamers. **Eur. J. Immunol**. 2011; 41: 2436-2446.

Beum, P.V., E.M. peek, M.A. Lindorfer, F.J. Beurskens, P.J. Engelberts, P.W.H.I. Paren, J.G.J. van de Winkel, and R.P. Taylor. Loss of CD20 and bound CD20 antibody from opsonized B cells occurs more rapidly because of trogocytosis mediated by Fc receptor-expressing effector cells than direct internalization by the B cells. **J. Immunol**. 2011; 187: 3438-3447.

Taylor, P.C., E. Quattrocchi, S. Mallett, R. Kurrasch, J. Petersen, and D.J. Chang. Ofatumumab, a fully human anti-CD20 mAb, in biological-naive, rheumatoid arthritis patients with an inadequate response to methotrexate: a randomised, double-blind, placebo-controlled clinical trial. **Ann Rheum Dis**. 2011; 70: 2119-2125.

Wierda, W.G., S. Padmanabhan, G.W. Chan, I.V. Gupta, S. Lisby, and A. Osterborg. Ofatumumab is active in patients with fludarabine-refractory CLL irrespective of prior rituximab: results from ph II international study. **Blood** 2011; 118: 5126-5129.

Wierda, W.G., T.J. Kipps, J. Dürig, L. Griskevicius, S. Stilgenbauer, J. Mayer, L. Smolej, G. Hess, R. Griniute, F.J. Hernandez-Ilizaliturri, S. Padmanabhan, M. Gorczyca, C.N. Chang, G. Chan, I. Gupta, T.G. Nielsen, and C.A. Russell; 407 Study Investigators. Chemoimmunotherapy with O-FC in previously untreated patients with chronic lymphocytic leukemia. **Blood**. 2011; 117: 6450-6458.

De Haij, S., J.H.M. Jansen, P. Boross, F.J. Beurskens, J.E. Bakema, D.L. Bos, A. Martens, J.S. Verbeek, P.W.H.I. Parren, J.G.J. van de Winkel, and J.H.W. Leusen. In vivo cytotoxicity of type I CD20 antibodies critically depends on FcR ITAM signaling. **Cancer Res**. 2010; 70: 3209-3217.

Kap, Y.S., N. van Driel, E. Blezer, P.W.H.I. Parren, W.K. Bleeker, J.D. Laman, J.L. Craigen, and B.A. 't Hart. Late B Cell Depletion with a Human Anti-Human CD20 IgG1{kappa} Monoclonal Antibody Halts the Development of Experimental Autoimmune Encephalomyelitis in Marmosets. **J. Immunol**. 2010; 185:3990-4003.

Østergaard, M., B. Baslund, W. Rigby, B. Rojkovich, C. Jorgensen, P.T. Dawes, C. Wiell, D.J. Wallace, S.C. Tamer, H. Kastberg, J. Petersen, and S. Sierakowski. Ofatumumab, a human anti-CD20 monoclonal antibody, for treatment of rheumatoid arthritis with an inadequate response to one or more disease-modifying antirheumatic drugs: results of a randomized, double-blind, placebo-controlled, phase I/II study. **Arthritis Rheum**. 2010; 62: 2227-2238.

Coiffier, B, N. Losic, B.B. Rønn, S. Lepretre, L.M. Pedersen, O. Gadeberg, H. Frederiksen, M.H. van Oers, J. Wooldridge, J. Kloczko, J. Holowiecki, A. Hellmann, J. Walewski, T. Robak, J. Petersen. Pharmacokinetics and pharmacokinetic/pharmacodynamic associations of ofatumumab, a human monoclonal CD20 antibody, in patients with relapsed or refractory chronic lymphocytic leukaemia: a phase 1-2 study. **Br. J. Haematol**. 2010;150: 58-71.

Wierda, WG, T.J. Kipps, J. Mayer, S. Stilgenbauer, C.D. Williams, A. Hellmann, T. Robak, R.R. Furman, P. Hillmen, M. Trneny, M.J. Dyer, S. Padmanabhan, M. Piotrowska, T. Kozak, G. Chan, R. Davis, N. Losic, J. Wilms, C.A. Russell, and A. Osterborg. Hx-CD20-406 Study Investigators. Ofatumumab as single-agent CD20 immunotherapy in fludarabine-refractory chronic lymphocytic leukemia. **J. Clin. Oncol**. 2010; 28: 1749-1755.

Ofatumumab Continued

Pawluczko wycz, A., F.J. Beurskens, P.V. Beum, M.A. Lindorfer, J.G.J. van de Winkel, P.W.H.I. Parren, and R.P. Taylor. Binding of submaximal C1q promotes complement-dependent cytotoxicity (CDC) of B cells opsonized with anti-CD20 mAbs ofatumumab (OFA) or rituximab (RTX): Considerably higher levels of CDC are induced by OFA than by RTX. **J. Immunol.** 2009; 183: 749-758.

Beurskens, F.J., S.R. Ruuls, P.J. Engelberts, T. Vink, W.J. Mackus, J.G.J. van de Winkel, and P.W.H.I. Parren. Complement activation impacts B-cell depletion by both type I and type II CD20 monoclonal antibodies. **Blood** 2008; 112: 4354-4355.

Beum P.V., M.A. Lindorfer, F. Beurskens, P.T. Stukenberg, P.W.H.I. Parren, J.G.J. van de Winkel, and R.P. Taylor. Complement activation on B lymphocytes opsonized with rituximab or ofatumumab produces substantial changes in membrane structure preceding cell lysis. **J. Immunol.** 2008; 181: 822-832.

Hagenbeek A., O. Gadeberg, P. Johnson, L.M. Pedersen, J. Walewski, A. Hellmann, B.K. Link, T. Robak, M. Wojtukiewicz, M. Pfreundschuh, M. Kneba, A. Engert, P. Sonneveld, M. Flensburg, J. Petersen, N. Losic, J. Radford. First clinical use of ofatumumab, a novel fully human anti-CD20 monoclonal antibody in relapsed or refractory follicular lymphoma: results of a phase 1/2 trial. **Blood** 2008; 111: 5486-5495.

Wijngaarden, S., J.G.J. van de Winkel, J.W.J. Bijlsma, F.P.J.G. Lafeber, and J.A.G. van Roon. Treatment of rheumatoid arthritis patients with anti-TNF- α monoclonal antibody is accompanied by down-regulation of activating Fc γ Receptor I on monocytes. **Clin. Exp. Rheumatol.** 2008; 26: 89-95.

Winiarska, M., J. Bil, E. Wilczek, G.M. Wilczynski, M. Lekka, P.J. Engelberts, W.J.M. Mackus, E. Gorska, L. Bojarski, T. Stoklosa, D. Nowis, Z. Kurzaj, M. Makowski, E. Glodkowska, T. Issat, P. Mrowka, W. Lasek, A. Dabrowska-Iwanicka, G.W. Basak, M. Wasik, K. Warzocha, M. Sinski, Z. Gaciong, M. Jakobisiak, P.W.H.I. Parren, and J. Golab. Statins impair antitumor effects of Rituximab by inducing conformational changes of CD20. **PLoS Medicine** 2008; 5: e64.

Bleeker, W.K., M.E. Munk, W.J.M. Mackus, J.H.N. van den Brakel, M. Pluyter, M.J. Glennie, J.G.J. van de Winkel, and P.W.H.I. Parren. Estimation of dose requirements for sustained in vivo activity of a therapeutic human anti-CD20 antibody. **Brit. J. Haematol.** 2008; 140: 303-312.

Coiffier, B., S. Lepetre, L.M. Pedersen, O. Gadeberg, H. Fredriksen, M.H. van Oers, J. Wooldridge, J. Kloczko, J. Holowiecki, A. Hellmann, J. Walewski, M. Flensburg, J. Pedersen and T. Robak. Safety and efficacy of ofatumumab, a fully human monoclonal anti-CD20 antibody, in patients with relapsed or refractory B-cell chronic lymphocytic leukemia: a phase 1-2 study. **Blood** 2008; 111: 1094-1100.

Teeling, J., W.J.M. Mackus, L.J.J.M. Wiegman, J.H.N. van den Brakel, S.A. Beers, R.R. French, T. van Meerten, S. Ebeling, T. Vink, J.W. Sloodstra, P.W.H.I. Parren, M.J. Glennie, and J.G.J. van de Winkel. The biological activity of human CD20 monoclonal antibodies is linked to unique epitopes on CD20. **J. Immunol.** 2006; 177: 362-371.

Teeling, J.L., R.R. French, M.S. Cragg, J. van den Brakel, M. Pluyter, H. Huang, C. Chan, P.W.H.I. Parren, C.E. Hack, M. Dechant, T. Valerius, J.G.J. van de Winkel and M.J. Glennie. Characterisation of new human CD20 monoclonal antibodies with potent cytolytic activity against non-Hodgkin lymphomas. **Blood** 2004; 104 : 1793-1800.

Daratumumab

Richardson, P., H. Lokhorst, A. Palumbo, H. Nahi, J. Laubach, P. Gimsing., S. Lisby, A. Cakana, N. Constantin Brun and T. Plesner. Daratumumab. Anti-CD38 monoclonal antibody, Treatment of multiple myeloma. **Drugs Future.** 2013; 38(8), 545.

Groen, R.W.J., R.A. Raymakers, H.J. Prins, L. Aalders, F.M. Hofhuis, B. van Kessel, H. Rozemuller, J.D. de Bruijn, M. de Weers, P.W.H.I. Parren, H.M. Lokhorst, T. Mutis, A.C.M. Martens. Reconstructing the human hematopoietic niche in immune deficient mice, opportunities for studying primary multiple myeloma. **Blood.** 2012; 120(3): e9-e16.

van der Veer, M.S., M de Weers, B van Kessel, J M Bakker, S Wittebol, P W H I Parren, H M Lokhorst and T Mutis The therapeutic human CD38 antibody daratumumab improves the anti-myeloma effect of newly emerging multi-drug therapies. **Blood Cancer Journal.** (2011) 1, e41

De Weers, M., Y.-T. Tai, M.S. van der Veer, J.M. Bakker, T. Vink, D.C.H. Jacobs, L.A. Oomen, M. Peipp, T. Valerius, J.W. Slootstra, T. Mutis, W.K. Bleeker, K.C. Anderson, H.M. Lokhorst, J.G.J. van de Winkel, and P.W.H.I. Parren. Daratumumab, a novel therapeutic human CD38 monoclonal antibody, effectively induces killing of multiple myeloma tumor cells. **J. Immunol.** 2011; 186: 1840-1848.

Van der Veer, M.S., M. de Weers, B. van Kessel, J.M. Bakker, S. Wittebol, P.W. Parren, H.M. Lokhorst, T. Mutis. Towards effective immunotherapy of myeloma: enhanced elimination of myeloma cells by combination of lenalidomide with the human CD38 monoclonal antibody daratumumab. **Haematologica.** 2011; 96: 284-90.

HuMax-TF-ADC

Breij, E.C.W., B.E.C.G. de Goeij, S. Verploegen, D.H. Schuurhuis, A. Amirkhosravi, J. Francis, V. Breinholt Miller, M. Houtkamp, W.K. Bleeker, D. Satijn and P.W.H.I. Parren. An antibody-drug conjugate that targets tissue factor exhibits potent therapeutic activity against a broad range of solid tumors. **Cancer Res.** 2014; 74: 1214-1226.

DuoBody

Labrijn, A.F., J.I. Meesters, P. Priem, R.N. de Jong, E.T.J. van den Bremer, M.D. van Kampen, A.F. Gerritsen, J. Schuurman and P.W.H.I. Parren. Controlled Fab-arm exchange for the generation of stable bispecific IgG1. **Nat. Prot.** 2014; 9(10): 2450-2463.

Labrijn, A.F. J.I. Meesters, B.E.C.G. de Goeij, E.T.J. van den Bremer, J. Neijssen, M.D. van Kampen, K. Strumane, S. Verploegen, A. Jundu, M.J. Gramer, P.H.C. van Berkel, J.G.J. van de Winkel, J. Schuurman, P.W.H.I. Parren. Efficient generation of stable bispecific IgG1 by controlled Fab-arm exchange. **PNAS.** 2013 Mar 26; 110(13):5145-50.

1Almagro, J.C., G.L. Gilliland, J. Scott, J.W. Larrick, A. Plückthun, T. Veldman, G.P. Adams, P.W.H.I. Parren, K.A. Chester, A. Bradbury, J.M. Reichert and J.S. Huston. Antibody Engineering and Therapeutics Conference; The Annual Meeting of the Antibody Society, December 8-12, 2013, Huntington Beach, CA. **mAbs.** 2013; 5(6), 817-25.

Gramer, M.J., E.T.J. van den Bremer, M.D. van Kampen, A. Kundu, P. Kopfmann, E. Etter, D. Stinehelfer, J. Long, T. Lannom, E.H. Noordergraaf, J. Gerritsen, A.F. Labrijn, J. Schuurman, P.H.C. van Berkel and P.W.H.I. Parren. Production of stable bispecific IgG1 by controlled Fab-arm exchange: scalability from bench to large scale manufacturing by application of standard approaches. **mAbs.** 2013; 5(6), 962-973.

Schuurman, J., A.F. Labrijn, P.W.H.I. Parren. Fab-arm exchange. What's in a name? **MAbs.** 2012; 4(6):36.

Labrijn, A.F., T. Rispens, J. Meesters, R.J. Rose, T.H. den Bleker, S. Loverix, E.T.J. van den Bremer, J. Neijssen, T. Vink, I. Lasters, R.C. Aalberse, A.J.R. Heck, J.G.J. van de Winkel, J. Schuurman, and P.W.H.I. Parren. Species-specific determinants in the immunoglobulin CH3 domain enable Fab-arm exchange by affecting the non-covalent CH3-CH3 interaction strength. **J. Immunol.** 2011; 187: 3238-3246.

Rose R.J., A.F. Labrijn, E.T.J. van den Bremer, S. Loverix, I. Lasters, P.H.C. van Berkel, J.G.J. van de Winkel, J. Schuurman, P.W.H.I. Parren, and A.J.R. Heck. Quantitative analysis of the interaction strength and dynamics of human IgG4 half-molecules by native mass spectrometry. **Structure** 2011; 19: 1274-1282.

Labrijn A.F., J. Schuurman, J.G.J. van de Winkel, and P.W.H.I. Parren. Reply to Fab Arm exchange (correspondence). **Nature Biotechnol.** 2010; 28: 125-126.

Labrijn, A.F., A. Ortiz Buijsse, E.T.J. van den Bremer, A.Y.W. Verwilligen, W.K. Bleeker, S.J. Thorpe, J. Killestein, C.H. Polman, R.C. Aalberse, J. Schuurman, J.G.J. van de Winkel, and P.W.H.I. Parren. Therapeutic IgG4 antibodies engage in Fab-arm exchange with endogenous human IgG4 in vivo. **Nature Biotechnol.** 2009; 27: 767-771.

van der Neut Kolschoten, M., J. Schuurman, M. Losen, W.K. Bleeker, P. Martinez-Martinez, E. Vermeulen, T.H. den Bleker, L. Wiegman, T. Vink, L.A. Aarden, M.H. De Baets, J.G.J. van de Winkel, R.C. Aalberse, P.W.H.I. Parren. Anti-inflammatory activity of human IgG4 antibodies by dynamic Fab arm exchange. **Science** 2007; 317: 1554-1557.

Vink, T., M. Oudshoorn-Dickmann, M. Roza, J.J. Reitsma and R.N. de Jong. A simple, robust and highly efficient transient expression system for producing antibodies. **Methods**. 2014; 65(1), 5-10.

Pre-Clinical

Diebolder, C.A., F.J. Beurskens, R.N. de Jong, R.I. Koning, K. Strumane, M.A. Lindorfer, J.G.J. van de Winkel, I.A. Wilson, A.J. Koster, R.P. Taylor, E. Ollmann Saphire, D.R. Burton, J. Schuurman, P. Gros and P.W.H.I. Parren. Complement is activated by IgG hexamers assembled at the cell surface. **Science**. 2014; 343: 1260-1263.

Nijhof, I., R.W.J. Groen, W.A. Noort, B. van Kessel, R. Korlaar-de Jong, J. Bakker, J. Lammerts-van Bueren, P.W.H.I. Parren, H.M. Lokhorst, N.W.C.J. van de Donk, A.C.M. Martens and T. Mutis. Preclinical evidence for the therapeutic potential of CD38-targeted immuno-chemotherapy in multiple myeloma patients refractory to lenalidomide and bortezomib. **Clin. Cancer Res.** In Press.

Nijhof, I., J. Lammerts van Bueren, B. van Kessel, P. Andre, Y. Morel, H.M. Lokhorst, N. van de Donk P.W.H.I. Parren and T. Mutis. Daratumumab-mediated lysis of primary multiple myeloma cells is enhanced in combination with the human anti-KIR antibody IPH2102 and lenalidomide. **Haematologica**. In Press.

Rosati, S., E.T.J. van den Bremer, J. Schuurman, P.W.H.I. Parren, J.P. Kamerling and A.J. R. Heck. In-depth qualitative and quantitative analysis of composite glycosylation profiles and other micro-heterogeneity on intact monoclonal antibodies by high-resolution native mass spectrometry using a modified Orbitrap. **mAbs**. 2013; 5(6), 917-924.

Boross, P., S. Lohse, M. Nederend, J.H.M. Jansen, G. van Tetering, M. Dechant, M. Peipp, L. Royle, L. Boon, N. van Rooijen, W. Bleeker, P.W.H.I. Parren, J.G.J. van de Winkel, T. Valerius and J.H.W. Leusen. IgA EGFR antibodies mediate tumor killing in vivo. **EMBO Mol. Med.** 2013; 5(8), 1213-26.

Engelberts, P.J., C. Badoil, F.J. Beurskens, D. Boulay-Moine, K. Grivel, P.W.H.I. Parren, M. Moulard. A quantitative flow cytometric assay for determining binding characteristics of chimeric, humanized and human antibodies in whole blood: Proof of principle with rituximab and ofatumumab. **Journal of Immunological Methods**. 338(2013): 8-17.

Glorius, P. A. Baerenwaldt, C. Kellner, M. Staudinger, M. Dechant, M. Stauch, F.J. Beurskens, P.W.H.I. Parren, J.G.J. van de Winkel, T. Valerius, A. Humpe, R. Repp, M. Gramatzki, F. Nimmerjahn, M. Peipp. the novel tribody [(CD20)₂CD16] efficiently triggers effector cell-mediated lysis of malignant B cells. **Leukemia**. (2013) 27: 190-201.

Rispens, T. J. Meesters, T.H. den Bleker, P. Ooijevaar-De Heer, J. Schuurman, P.W.H.I. Parren, A. Labrijn, R.C. Aalberse. Fc-Fc interactions of human IgG4 require dissociation of heavy chains and are formed predominantly by the intra-chain hinge isomer. **Molecular Immunology**. 53 (2013): 35-42.

Rose, R.J., P.H.C. van Berkel, E.T.J. van den Bremer, A.F. Labrijn, T. Vink, J. Schuurman, A.J.R. Heck, P.W.H.I. Parren. Mutation of Y407 in the CH3 domain dramatically alters glycosylation and structure of human IgG. **mAbs** 5:2, 1-10 Mar-Apr 2013.

Ball, C., B. Fox, S. Hufton, G. Sharp, S. Poole, R. Stebbings, D. Eastwood, L. Findlay, P.W.H.I. Parren, R. Thorpe, A. Bristow, S.J. Thorpe. Antibody constant region influences TGN1412-like functional activity in vitro. **The Journal of Immunology**. 2012; Nov-12.

Kalay, H., M. Ambrosini, P.H.C. van Berkel, P.W.H.I. Parren, Y. van Kooyk, J.J.G. Vallejo. Online nanoliquid chromatography-mass spectrometry and nanofluorescence detection for high-resolution quantitative N-glycan analysis. **Analytical Biochemistry**. 2012; 423(1): 153-162.

Kellner, C., D. Hallack, P. Glorius, M. Staudinger, S.M. Nodehi, R. Repp, M. de Weers, J.G.J. van de Winkel, P.W.H.I. Parren, A. Humpe, M. Gramatzki and M. Peipp. Fusion proteins between ligands for NKG2D and CD20-directed single chain variable fragments sensitize lymphoma cells for natural killer cell-mediated lysis and enhance antibody dependent cellular cytotoxicity. **Leukemia**. 2012; 26(4): 830-834

Kellner, C., T. Maurer, D. Hallack, R. Repp, J.G.J. van de Winkel, P.W.H.I. Parren, T. Valerius, A. Humpe, M. Gramatzki and M. Peipp. Mimicking An Induced Self Phenotype by Coating Lymphomas with the Nkp30-Ligand B7-H6 Promotes NK Cell Cytotoxicity. **The Journal of Immunology**. 2012; 189(10): 5037-5046.

Lohse, S., C. Brunke, S. Derer, M. Peipp, P. Boross, C. Kellner, T. Beyer, M. Dechant, J.G.J. van de Winkel, J.H.W. Leusen, T. Valerius. Characterisation of a mutated IgA2 antibody of the m(1) allotype against the epidermal growth factor receptor for the recruitment of monocytes and macrophages. **Journal of Biological Chemistry**. 2012; 287(30): 25139-25150.

Moldt, B., M. Shibata-Koyama, E. Rakasz, N. Schultz, Y. Kanda, D. Dunlop, S. Finstad, C. Jin, G. Landucci, M. Alpert, A.S. Dugast, P. Parren, F. Nimmerjahn, D. Evans, G. Alter, D. Forthal, J. Schmitz, S. Iida, P. Poignord, D. Watkins, A. Hessel, D. Burton. A non-fucosylated variant of the anti-HIV-1 MAb b12 has enhanced FcγRIIIa-mediated antiviral activity in vitro but not improved protection against mucosal SHIV challenge in macaques. **Journal of Virology**. 2012; 86(11): 6189-6196.

Otten, M.A., J.E. Bakema, C.W. Tuk, M.J. Glennie, A.L. Tutt, R.H. Beelen, J.G. van de Winkel and M. van Egmond. Enhanced FcαRI-mediated neutrophil migration towards tumour colonies in the presence of endothelial cells. **European Journal of Immunology**. 2012; 42(7): 1815-1821.

Overdijk, M.B., S. Verploegen, W.K. Bleeker, P.W.H.I. Parren. Role of IgG Fc Receptors in Monoclonal Antibody Therapy of Cancer. **IgG Fc: Linking Adaptive and Innate Immunity**. M.E. Ackerman and F. Nimmerjan eds. Elsevier, Amsterdam.

Overdijk, M.B., S. Verploegen, A.O. Buijsse, T. Vink, J.H.W. Leusen, W.K. Bleeker, P.W.H.I. Parren. Cross-talk between human IgG isotypes and murine effector cells. **The Journal of Immunology**. 2012; 189(7): 3430-3438.

Peipp, M., J.G.J. van de Winkel, and T. Valerius. Molecular engineering to improve antibodies' anti-lymphoma activity. **Best Pract. Res. Clin. Haematol**. 2011; 24: 217-229.

Gramer, M.J., J.J. Eckblad, R. Donahue, J. Brown, K. Vickerman, P. Priem, E.T. van den Bremer, J. Gerritsen, and P.H. van Berkel. Modulation of antibody galactosylation through feeding of uridine, manganese chloride, and galactose. **Biotechnol. Bioeng**. 2011; 108: 1591-1602.

Gerritsen, A.F., M. Bosch, M. de Weers, J.G.J. van de Winkel, and P.W.H.I. Parren. High throughput screening for antibody induced complement-dependent cytotoxicity in early antibody discovery using homogeneous macroconfocal fluorescence imaging. **J. Immunol. Methods** 2010; 352: 140-146.

Van Meerten, T., H. Rozemuller, S. Hol, P. Moerer, M. Zwart, A. Hagenbeek, W.J.M. Mackus, P.W.H.I. Parren, J.G.J. van de Winkel, S.B. Ebeling, and A.C.M. Martens. HuMab-7D8, a monoclonal antibody directed against the membrane-proximal small loop epitope of CD20 can effectively eliminate CD20^{low} expressing tumor cells that resist Rituximab mediated lysis. **Haematologica** 2010; 95: 2063-2071 [Epub ahead of print].

Van Berkel, P.H.C., J. Gerritsen, E. van Voskuilen, G. Perdok, T. Vink, J.G.J. van de Winkel, and P.W.H.I. Parren. Rapid production of recombinant human IgG with improved ADCC effector function in a transient expression system. **Biotechnol. Bioeng**. 2009; 105: 350-357.

Van Berkel, P.H.C., J. Gerritsen, G. Perdok, J. Valbjørn, T. Vink, J.G.J. van de Winkel, and P.W.H.I. Parren. N-linked glycosylation is an important parameter for optimal selection of cell lines producing biopharmaceutical human IgG. **Biotechnol. Prog**. 2009; 25: 244-251.

Raaz D., M. Herrmann, A.B. Ekici, L. Klinghammer, B. Lausen, R.E. Voll, J.H.W. Leusen, J.G.J. van de Winkel, W.G. Daniel, A. Reis, C.D. Garlachs. FcγRIIIa genotype is associated with acute coronary syndromes as first manifestation of coronary artery disease. **J. Atherosclerosis** 2009; 205: 512-516.

Ruuls, S., J.J. Lammerts van Bueren, J.G.J. van de Winkel, and P.W.H.I. Parren. Novel human antibody therapeutics: the age of the Umabs. **Biotechnol. J**. 2008; 3: 1157-1171.

Parren, P.W.H.I., and J.G.J. van de Winkel. An integrated science-based approach to drug development. **Curr. Opin. Immunol**. 2008; 20:426-430.

Otten, M.A., G.J. van der Bij, S.J. Verbeek, E. Rudolph, F. Nimmerjahn, J.V. Ravetch, R.H.J. Beelen, J.G.J. van de Winkel, and M. van Egmond. Experimental antibody therapy of liver metastases reveals functional redundancy between FcγRI and FcγRIV. **J. Immunol.** 2008; 181: 6829-6836.

Aarden, L., S.R. Ruuls, and G. Wolbink. Immunogenicity of anti-tumor necrosis factor antibodies - toward improved methods of anti-antibody measurement. **Curr. Opin. Immunol.** 2008; 20:431-235.

Labrijn, A.F., R.C. Aalberse, and J. Schuurman. When binding is enough: nonactivating antibody formats. **Curr. Opin. Immunol.** 2008; 20:479-485.

Skov, L., F.J. Beurskens, C.O.C. Zachariae, S. Reitamo, J. Teeling, D. Satijn, K.M. Knudsen, E.P.J. Boot, D. Hudson, O. Baadsgaard, P.W.H.I. Parren, and J.G.J. van de Winkel. IL-8 as antibody therapeutic target in inflammatory diseases: reduction of clinical activity in Palmoplantar Pustulosis. **J. Immunol.** 2008; 181: 669-679.

Beekman, J.M., C.E. van der Poel, J.A. van der Linden, D.L.C. van den Berg, P.V.E. van den Berghe, J.G.J. van de Winkel, and J.H.W. Leusen. Filamin A stabilizes FcγRI surface expression and prevents its lysosomal routing. **J. Immunol.** 2008, 180: 3938-3945.

McIntosh, R.S., J. Shi, R.M. Jennings, J.C. Chappel, T.F. de Koning-Ward, T. Smith, J. Green, M. van Egmond, J.H.W. Leusen, M. Lazarou, J.G.J. van de Winkel, T.S. Jones, B.S. Crabb, A.A. Holder, and R.J. Pleass. The importance of human FcγRI in mediating protection to malaria. **PLoS Pathogens** 2007; 3: e72.

Dechant, M., T. Beyer, T. Schneider-Merck, W. Weisner, M. Peipp, J.G.J. van de Winkel, and T. Valerius. Effector mechanisms of recombinant IgA antibodies against Epidermal Growth Factor Receptor. **J. Immunol.** 2007; 179: 2936-2943.

Otten, M.A., J.H.W. Leusen, E. Rudolph, J.A. van der Linden, R.H.J. Beelen, J.G.J. van de Winkel, and M. van Egmond. FcR γ chain dependent signaling in immature neutrophils is mediated by FcαRI, but not by FcγRI. **J. Immunol.** 2007; 179: 2918-2924.

Hessell, A.J., L. Hangartner, M. Hunter, C.E.G. Havenith, F.J. Beurskens, J.M. Bakker, C.M.S. Lanigan, G. Landucci, D.N. Forthal, P.W.H.I. Parren, P.A. Marx, and D.R. Burton. Fc receptor but not complement binding is important in antibody protection against HIV. **Nature** 2007; 449: 101-104.

Bakema, J.E., S. De Haij, C.F. den Hartog-Jager, J. Bakker, G. Vidarsson, M. Van Egmond, J.G.J. van de Winkel, and J.H.W. Leusen. Signaling through mutants of the IgA receptor, CD89, and consequences for FcR γ-chain interaction. **J Immunol.** 2006; 176: 3603-3610.

Rodriguez, M.E., S.M.M. Hellwig, M.L.A. Perez Vidakovics, G.A.M. Berbers, and J.G.J. van de Winkel. Bordetella pertussis attachment to respiratory epithelial cells can be impaired by Fimbriae-specific antibodies. **FEMS Immunol. Med. Microbiol.** 2006; 46: 39-47.

Vidarsson, G., A.M. Stemerding, F.E.M. Rebers, M. de Haas, and J.G.J. van de Winkel. FcRn: an IgG receptor on phagocytes with a novel role in phagocytosis. **Blood** 2006; 108: 3573-3579.

Bevaart, L., J. Goldstein, L. Vitale, C. Russoniello, J. Tremblay, J. Zhang, R.F. Graziano, J.H.W. Leusen, J.G.J. van de Winkel, and T. Keler. Direct targeting of genetically modified tumour cells to FcγRI triggers potent tumor cytotoxicity. **Brit. J. Haematol.** 2006; 132: 317-325.

Bevaart, L., M.J.H. Jansen, M.J. van Vugt, J.S. Verbeek, J.H.W. Leusen, and J.G.J. van de Winkel. The high-affinity IgG receptor, FcγRI, plays a central role in antibody therapy of experimental melanoma. **Cancer Res.** 2006; 66: 1261-1264.

Van Vuuren, A.J., J. van Roon, V. Walraven, I. Stuij, M.C. Harmsen, J.G.J. van de Winkel, and T. Thepen. CD64-directed immunotoxin inhibits arthritis in a novel CD64 transgenic rat model. **J. Immunol.** 2006; 176: 5833-5838.

Steeghs, L., S.J. van Vliet, H. Uronen-Hansson, A. van Mourik, A. Engering, M. Sanchez-Hernandez, N. Klein, R. Callard, J.P.M. van Putten, P. van der Ley, Y. van Kooyk, and J.G.J. van de Winkel. Neisseria meningitidis expressing IgT lipopolysaccharide targets DC-SIGN and modulates dendritic cell function. **Cell. Microbiol.** 2006; 8: 316-325.

Van Royen, A., E.A.M. Sanders, V. Walraven, M. Voorhorst, E. Saeland, J.L. Teeling, A. Gerritsen, M.A. van dijk, W. Kuis, G.T. Rijkers, L. Vitale, T. Keler, S.E. McKenzie, J.H.W. Leusen, and J.G.J. van de Winkel. Novel human CD32 mAb blocks experimental immune hemolytic anemia in FcγRIIA transgenic mice. **Brit. J. Haematol.** 2005; 130: 130-137.

Vidarsson, G., N. Overbeeke, A.M. Stemerding, G. van den Dobbelsteen, P. van Ulsen, P. van der Ley, M. Kilian, and J.G.J. van de Winkel. Working mechanism of IgA1-protease: cleavage of IgA1 antibody to PorA of *Neisseria meningitidis* requires de novo synthesis of IgA1-protease. **Infect. Immunity** 2005; 73: 6721-6726.

Bevaart, L., H.H. van Ojik, A.W. Sun, T.H. Sulahain, J.H.W. Leusen, G.J. Weiner, J.G.J. van de Winkel and M.J. van Vugt. CpG oligodeoxynucleotides enhance FcγRI-mediated cross presentation by dendritic cells. **Int. Immunol.** 2004; 16 : 1091-1098.

Beekman, J.M., J. van der Linden, J. Bakema, B. Tops, M. Hinten, M.J. van Vugt, J.G.J. van de Winkel and J.H.W. Leusen. Modulation of FcγRI (CD64) ligand binding by blocking peptides of periplakin. **J. Biol. Chem.** 2004; 279 : 33875-33881.

Beekman, J.M., J. Bakema, J.H.W. Leusen and J.G.J. van de Winkel. Direct interaction between FcγRI (CD64) and periplakin controls receptor endocytosis and ligand binding capacity. **Proc. Natl. Acad. Sci. USA** 2004; 101 : 10392-10397.

Villadsen, L.S., L. Skov and O. Baadsgaard. Biological response modifiers and their potential use in the treatment of inflammatory skin diseases. **Exp. Dermatol.** 2003; 12 : 1-10.

Van Ojik, H.H., L. Bevaart, C.E. Dahle, A. Bakker, M.J. Jansen, M.J. van Vugt, J.G.J. van de Winkel and G.J. Weiner. CpG-A and B oligodeoxynucleotides enhance the efficacy of antibody therapy by activating different effector cell populations. **Cancer Res.** 2003; 63 : 5595-600.

Parren, P.W.H.I., J.H.W. Leusen and J.G.J. van de Winkel. Antibody-catalyzed water oxidation: state-of-the-art immunity or ancient history? **Trends Immunol.** 2003; 24 : 467-9.

Hellwig, S.M.M., M.E. Rodriguez, G.A. Berbers, J.G.J. van de Winkel and F.R. Mooi. Crucial role of antibodies to pertactin in *Bordetella pertussis* immunity. **J. Infect. Dis.** 2003; 188 : 738-42.

Saeland, E., G. Vidarsson, J.H.W. Leusen, E. van Garderen, M.H. Nahm, H. Vile-Weekhout, V. Walraven, A.M. Stemerding, J.S. Verbeek, G.T. Rijkers, W. Kuis, E.A.M. Sanders and J.G.J. van de Winkel. Central role of complement in passive protection by human IgG1 and IgG2 anti-pneumococcal antibodies in mice. **J. Immunol.** 2003; 170 : 6158-64.

Saeland, E., J.H.W. Leusen, G. Vidarsson, W. Kuis, E.A.M. Sanders, I. Jonsdottir and J.G.J. van de Winkel. Role of Fcγ receptors in vaccine induced immunity to *Streptococcus pneumoniae*. **J. Infect. Dis.** 2003; 187 : 1686-93.

Stassen, M.H., F. Meng, E. Melgert, B.M. Machiels, S.H. Im, S. Fuchs, A.F. Gerritsen, M.A. van Dijk, J.G.J. van de Winkel and M.H. de Baets. Experimental autoimmune myasthenia gravis in mice expressing human immunoglobulin loci. **J. Neuroimmunol.** 2003; 135 : 56-61.

Monteiro, R.C. and J.G.J. van de Winkel. IgA Fc receptors. **Annu. Rev. Immunol.** 2003; 177-204.

Van Spriel, A.B., H.H. van Ojik, A. Bakker, M.J.H. Jansen and J.G.J. van de Winkel. Mac-1 (CD11b/CD18) is crucial for effective Fc receptor-mediated immunity to melanoma. **Blood** 2003; 101 : 253-258.

Glennie, M.J. and J.G.J. van de Winkel. Renaissance of cancer therapeutic antibodies. **Drug Discov. Today** 2003; 8 : 503-510

Dechant, M., G. Vidarsson, B. Stockmeyer, R. Repp, M.J. Glennie, M. Gramatzki, J.G.J. van de Winkel and T. Valerius. Chimeric IgA antibodies against HLA class II effectively trigger lymphoma cell killing. **Blood** 2002; 100 : 4574-4580.

Ioan-Facsinay, A., S.J. de Kimpe, S.M.M. Hellwig, P.L. van Lent, F.M.A. Hofhuis, H.H. van Ojik, C. Sedlik, S.A. da Silveira, J. Gerber, Y.F. de Jong, R. Roozendaal, L.A. Aarden, W.B. van den Berg, T. Saito, D. Mosser, S. Amigorena, C. Izui, G.-J.B. van Ommen, M. van Vugt, J.G.J. van de Winkel and J.S. Verbeek. FcγRI (CD64) contributes substantially to severity of arthritis, hypersensitivity responses and protection from bacterial infection. **Immunity** 2002; 16 : 391-402.

Zalutumumab

Saloura, V., E.E.W. Cohen, L. Licitra, S. Billan, J. Dinis, S. Lisby and T.C. Gaule. An open label single arm, phase II trial of zalutumumab, a human monoclonal anti EGFR antibody, in patients with platinum refractory squamous cell carcinoma of the head and neck. **Cancer Chemother. Pharmacol.** 2014; 73: 1227-1239.

Derer, S., S. Berger, M. Schlaeth, T. Schneider-Merck, K. Klausz, S. Lohse, M.B. Overdijk, M. Dechant, C. Kellner, I. Nagelmeijer, A. H. Scheel, J.J. Lammerts van Bueren, J.G.J. van de Winkel, P.W.H.I. Parren, M. Peipp, T. Valerius. Oncogenic KRAS impairs EGFR antibodies' efficiency by C/EBP β -dependent suppression of EGFR expression. **Neoplasia.** 2012; 14(3): 190-205.

Lammerts van Bueren, J.J., T. Rispens, S. Verploegen, T. van der Palen-Merkus, A.L. Turinsky, S. Stapel, L.J. Workman. H. James, P.H.C. van Berkel, J.G.J. van de Winkel, T.A.E. Platts-Mills, and P.W.H.I. Parren. Anti-galactose- α -1,3-galactose IgE from allergic patients does not bind α -galactosylated glycans on intact therapeutic antibody Fc domains. **Nature Biotechnol.** 2011; 29: 574-576.

Overdijk M.B., S. Verploegen, J.H. van den Brakel, J.J. Lammerts van Bueren, T. Vink, J.G.J. van de Winkel, P.W.H.I. Parren, and W.K. Bleeker. EGFR antibody induced antibody-dependent cellular cytotoxicity plays a prominent role in inhibiting metastasis and tumorigenesis even of mutated KRAS tumor cells. **J. Immunol.** 2011; 187: 3383-3390.

Klausz, K., S. Berger, J.J. Lammerts van Bueren, S. Derer, S. Lohse, M. Dechant, J.G.J. van de Winkel, M. Peipp, P.W.H.I. Parren, and T. Valerius. Complement-mediated tumor-specific cell lysis by antibody combinations targeting the epidermal growth factor receptor (EGFR) and its variant III (EGFRvIII). **Cancer Sci.** 2011; 102: 1761-1768.

Machiels, J.P., S. Subramanian, A. Ruzsa, G. Repassy, I. Lifirenko, A. Flygare, P. Sorensen, T. Nielsen, S. Lisby, and P.M. Clement. Zalutumumab plus best supportive care versus best supportive care alone in patients with recurrent or metastatic squamous-cell carcinoma of the head and neck after failure of platinum-based chemotherapy: an open-label, randomised phase 3 trial. **Lancet Oncol.** 2011; 12: 333-343.

Schneider-Merck, T., J.J. Lammerts van Bueren, S. Berger, K. Rossen, P.H.C. van Berkel, S. Derer, T. Beyer, S. Lohse, W.K. Bleeker, M. Peipp, P.W.H.I. Parren, J.G.J. van de Winkel, T. Valerius, and M. Dechant. Human IgG2 antibodies against epidermal growth factor receptor effectively trigger antibody-dependent cellular cytotoxicity but, in contrast to IgG1, only by cells of myeloid lineage. **J. Immunol.** 2010; 184: 512-520.

Dechant, M., W. Weisner, S. Berger, M. Peipp, T. Beyer, T. Schneider-Merck, J.J. Lammerts van Bueren, W.K. Bleeker, P.W.H.I. Parren, J.G.J. van de Winkel, and T. Valerius. Complement-dependent tumor cell lysis triggered by combinations of Epidermal Growth Factor receptor antibodies. **Cancer Research** 2008; 68: 4998-5003.

Peipp, M., T. Schneider-Merck, M. Dechant, T. Beyer, J.J. Lammerts van Bueren, W.K. Bleeker, P.W.H.I. Parren, J.G.J. van de Winkel, and T. Valerius. Tumor cell killing mechanisms of EGF-R antibodies are not affected by lung cancer-associated EGF-R kinase mutations. **J. Immunol.** 2008; 180: 4338-4345.

Lammerts van Bueren, J.J., W.K. Bleeker, H.O. Bøgh, M. Houtkamp, J. Schuurman, J.G.J. van de Winkel, and P.W.H.I. Parren. Effect of target dynamics on pharmacokinetics of a novel therapeutic antibody against the epidermal growth factor receptor: implications for the mechanisms of action. **Cancer Res.** 2006; 66: 7630-7638.

Bleeker, W.K., J.J. Lammerts van Bueren, H.H. van Ojik, A.F. Gerritsen, M. Pluyter, M. Houtkamp, E. Halk, J. Goldstein, J. Schuurman, M.A. van Dijk, J.G.J. van de Winkel and P.W.H.I. Parren. Dual mode of action of a human anti-epidermal growth factor receptor monoclonal antibody for cancer therapy. **J. Immunol.** 2004; 173 : 4699-4707.

Zanolimumab

d'Amore, F., J. Radford, T. Relander, M. Jerkeman, H. Tilly, A. Osterborg, F. Morschhauser, M. Gramatzki, M. Dreyling, B. Bang, and H. Hagberg. Phase II trial of Zanolimumab (HuMax-CD4) in relapsed or refractory non-cutaneous peripheral T cell lymphoma. **Br. J. Haematol.** 2010; 150: 565-573.

Villadsen, L.S., L. Skov, T.N. Dam, F. Dagnaes-Hansen, J. Rygaard, J. Schuurman, P.W.H.I. Parren, J.G.J. van de Winkel, and O. Baadsgaard. In situ depletion of CD4+ cells in human skin by Zanolimumab. **Arch. Dermatol. Res.** 2007; 298: 449-455.

Rider, D.A., C.E.G. Havenith, R. de Ridder, J. Schuurman, C. Favre, J.C. Cooper, S. Walker, O. Baadsgaard, S. Marschner, J.G.J. van de Winkel, J. Cambier, P.W.H.I. Parren, and D.R. Alexander. A human CD4 monoclonal antibody for the treatment of T cell lymphoma combines inhibition of T cell signaling by a dual mechanism with potent Fc-dependent effector activity. **Cancer Res.** 2007; 67: 9945-53.

Kim, Y.H., M. Duvic, E. Obitz, R. Gniadecki, L. Iversen, A. Osterborg, S. Whittaker, T.M. Illidge, T. Schwarz, R. Kaufmann, K. Cooper, K.M. Knudsen, S. Lisby, O. Baadsgaard, and S.J. Knox. Clinical efficacy of zanolimumab (HuMax-CD4): two phase 2 studies in refractory cutaneous T-cell lymphoma. **Blood** 2007; 109: 4655-4662.

Skov, L., K. Kragballe, C. Zachariae, E.R. Obitz, E.A. Holm, G.B. Jemec, H. Solvsten, H.H. Ibsen, L. Knudsen, P. Jensen, J.H. Petersen, T. Menne and O. Baadsgaard. HuMax-CD4: a fully human monoclonal anti-CD4 antibody for the treatment of psoriasis vulgaris. **Arch. Dermatol.** 2003; 139 : 1433-9.

Other

Melis, J, K. Strumane, S. Ruuls, F. Beurskens, J. Schuurman, P. Parren. Complement in therapy and disease - Regulating the complement system with antibody-based therapeutics. **Mol Immunol.** In Press

Bradbury et al. Standardize antibodies used in research. **Nature.** In Press.

Schuurman, J. and P.W.H.I. Parren. Editorial Overview: Mind the Gap. **Methods.** 2014; 65(1), 1-4

van Schouwenburg, P., S. Kruihof, C. Votsmeier, K. van Schie, M. H. Hart, R. de Jong, E. van Buren, M. van Ham, L. Aarden, G. Wolbink, D. Wouters, T. Rispens. Functional Analysis of the Anti-adalimumab Response Using Patient-derived Monoclonal Antibodies. **Bio. Chem.** 2014; 289(50): 34482-34288.

Da Roit, F., P.J. Engelberts, R.P. Taylor, E.C.W. Breijl, G. Gritti, A. Rambaldi, M. Introna, P.W.H.I. Parren, F.J. Beurskens and J. Golay. Ibrutinib interferes with the cell-mediated anti-tumour activities of therapeutic CD20 antibodies: implications for combination therapy. **Haematologica.** In Press.

Larrick J.W., P.W.H.I. Parren, J.S. Huston, D.R. Burton, G.P. Adams, L.M. Weiner, J.M. Reichert, J.K. Scott, M.R. Alfenito and T. Veldman. Antibody Engineering & Therapeutics Conference, the Annual Meeting of The Antibody Society, Huntington Beach, CA, December 7-11, 2014. **mAbs.** In Press.

Overdijk, M.B., S. Verploegen, W.K. Bleeker and P.W.H.I. Parren. Role of IgG Fc receptors in monoclonal antibody therapy of cancer. In: **Antibody Fc: Linking adaptive and innate immunity.** 2014. [Book chapter].

Schuurman, J., Y.F. Graus, A.F. Labrijn, S.R. Ruuls and P.W.H.I. Parren. Opening the door to innovation. **mAbs.** 2014; 6(4): 812-819.

Branderhorst, W., E.L.A. Blezer, M. Houtkamp, R.M. Ramakers, J.H. van den Brakel, H. Witteveen, F. van der Have, H.A. Gratama van Andel, B. Vastenhout, M. Stigter-van Walsum, G.A.M.S. van Dongen, M.A. Viergever, W.K. Bleeker and F.J. Beekman. Histological validation of ultra-high-resolution pinhole SPECT for imaging intratumoral antibody distributions in mouse xenografts. **J. Nucl. Med.** 2014; 55: 830-837.

De Goeij, B.E.C.G., M. Peipp, S. de Haij, E.N. van den Brink, C. Kellner, T. Riedl, R. de Jong, T. Vink, K. Strumane, W.K. Bleeker and P.W.H.I. Parren. HER2 monoclonal antibodies that do not interfere with receptor heterodimerization-induced signaling induce effective internalization and represent valuable components for rational antibody-drug conjugate design. **mAbs.** 2014; 6(2): 392-402.

Parren, W.H.I. and A. Lugovskoy. A review of "Therapeutic Antibody Engineering: Current and Future Advances Driving the Strongest Growth Area in the Pharmaceutical Industry" by William R. Strohl and Lila M. Strohl. **MAbs.** 5:2: 1-3; 2013.

van Schouwenburg, P.A., L.A. van de Stadt, R.N. de Jong, E.E.L. van Buren, S. Kruihof, E. de Groot, M. Hart, S.M. van Ham, T. Rispens, L. Aarden, G.J. Wolbink, D. Wouters. Adalimumab elicits a restricted anti-idiotypic antibody response in autoimmune patients resulting in functional neutralisation. **Annals of the Rheumatic Diseases**. 2013; 72: 104-109.

Almagro, J.C., G.L. Gilliland, F. Breden, J. Scott, D. Sok, M. Pauthner, J.M. Reichert, G. Helguera, R. Andrabi, R. Mabry, M. Bléry, J.E. Voss, J. Laurén, L. Abuqayyas, S. Barghorn, E Ben-Jacob, J.E. Crowe Jr, J.S. Huston, S.A. Johnston, E. Krauland, F. Lund-Johansen, W.A. Marasco, P.W.H.I. Parren and K.Y. Xu. **Antibody Engineering & Therapeutics**, December 8-12, 2013, Huntington Beach, CA. mAbs. 2014; 6(3): 577-618.

Derer, S., F.J. Beurskens, T. Rösner, M. Peipp and T. Valerius. Complement in Antibody-Based Tumor Therapy. **Crit. Rev. Immunol.** 2014; 34(3): 199-214.

Bangsgaard, N., M. Houtkamp, D.H. Schuurhuis, P.W.H.I. Parren, O. Baadsgaard, H.W.M. Niessen, L. Skov. Neutralization of IL-8 prevents the induction of dermatologic adverse events associated with the inhibition of epidermal growth factor receptor; a proof-of-principle study in human volunteers. **PLoS ONE**. June-2012, e39706.

Raaz-Schrauder, D., A.B. Ekici, L.E. Munoz, L. Klinghammer, R.E. Voll, J.H. Leusen, J.G. van de Winkel, A. Reis, G. Schett, C.D. Garlachs, M. Hermann. Patients with unstable angina pectoris show an increased frequency of the Fc gamma RIIa R131 allele. **Autoimmunity**. 2012; 45(7): 556-564.

Lafeuille, M.H., F. Vekeman, S.T. Wang, M. Kerrigan, L. Menditto and M.S. Duh. Lifetime costs to Medicare of providing care to patients with chronic lymphocytic leukemia. **Leuk. Lymphoma**. 2012; 53(6): 1146-1154.

Seshasayee, D. W.P. Lee, M. Zhou, J. Shu, E. Suto, J. Zhang, L. Diehl, C.D. Austin, Y.G. Meng, M. Tan, S.L. Bullens, S. Seiber, M.E. Fuentes, A.F. Labrijn, Y.M.F. Graus, L.A. Miller, E.S. Schelegle, D.M. Hyde, L.C. Wu, S.G. Hymowitz, and F. Martin. In vivo blockade of OX40 ligand inhibits thymic stromal lymphopoietin driven atopic inflammation. **J. Clin. Invest.** 2007; 117: 3868-3878.

Baslund, B., N. Tvede, B. Danneskiold-Samsoe, P. Larsson, G. Panayi, J. Petersen, L.J. Petersen, F. Beurskens, J. Schuurman, J.G.J. van de Winkel, P.W.H.I. Parren, J. A. Gracie, S. Jongbloed, F.Y. Liew, and I.B. McInnes. Targeting interleukin-15 in patients with rheumatoid arthritis (RA): a proof-of-concept study. **Arthritis Rheum**. 2005; 52: 2686-2692.

Villadsen, L.S., J. Schuurman, F. Beurskens, T.N. Dam, F. Dagnæs-Hansen, L. Skov, J. Rygaard, M.M. Voorhorst-Ogink, A.F. Gerritsen, M.A. van Dijk, P.W.H.I. Parren, O. Baadsgaard and J.G.J. van de Winkel. Resolution of psoriasis upon blockade of IL-15 biological activity in a xenograft mouse model. **J. Clin. Invest.** 2003; 112 : 1571-1580.