

Neil Berry, Division of Virology.
Publication PDF to June 2014

77. Ferguson, D., Mattiuzzo, G., Ham, C., Li, B., Rose, N., Mee, E., Page, M., Stebbings, R.S., Cranage, M.P., Almond, N., Towers, G.T., **Berry, N.** (2014). Early bio-distribution and persistence of a protective live attenuated SIV vaccine elicits localised innate responses in multiple lymphoid tissues *PLoS One* (accepted).
76. Gall, A., Morris, C., Kellam, P., **Berry, N.** (2014). Complete genome sequence of the WHO International Standard for HIV-1 RNA determined by deep sequencing (2014). *Genome Announcements*. Feb 6;2(1). e01254-13.
75. Hood, S., Mee, E., Perkins, H., Bowen, O., Dale, J., Almond, N., Karayiannis, P., Bright, H., **Berry, N.**, Rose, N. (2014). Immune cell changes in the periphery and liver of GBV-B-infected and convalescent red-bellied tamarins (*Saguinus labiatus*). *Virus Research* 179: 93-101.
74. **Berry N.J.** (2014). HIV-2 diagnosis and viral load measurements. Eds. Hope,T., Richman,D., Stevenson, M. Springer *Encyclopaedia of AIDS* (accepted, on-line).
73. Manoussaka, M., **Berry, N.**, Ferguson, D., Stebbings, R., Robinson, M., Page, M., Li, B., Das, A., Berkhout, B., Almond, N., Cranage, M. (2013). Occult replication of a conditionally-live attenuated SIV profoundly upregulates global T effector memory cell frequency. *Retrovirology*. 10:59.
72. Mattiuzzo, G., Rose, N.J., Almond, N., Towers, G.T., **Berry, N.** (2013). Upregulation of TRIM5 α gene expression after live attenuated simian immunodeficiency virus vaccination in Mauritian cynomolgus macaques but TRIM5 genotype has no impact on virus acquisition or vaccination outcome *J Gen Virol* (EPub Mar 1).
71. Gilliland, S.M., Jenkins, A., Parker, L., **Berry, N.**, Schepelmann, S., Minor, P. (2012). Identification of a novel mutation in the mumps fusion protein obtained from vaccine-related mumps infections *Biologicals*. (Epub Oct 19)
70. Gall, A., Ferns, B., Morris, C., Watson, S., Cotten, M., Robinson, M., **Berry, N.**, Pillay, D., Kellam P. (2012). Universal amplification, next-generation sequencing and assembly of HIV-1 genomes. *J Clin Micro*. 50(12):3838-44
69. Page, M., Stebbings, R., **Berry, N.**, Ferguson, D., Li, B., Hull, R., , Davies, L., Duffy, L., Elsley, W., Hall, J., Ham,C., Hassall, M., Quartey-Papafio, R., Mathy, N., Mee, E., Rose, N., Voss, G., Stott, E., Almond, N. (2012). Heterologous protection elicited by candidate monomeric HIV-1 rgp120 vaccine in the absence of cross-neutralising antibodies in a macaque model. *Retrovirology*. 9:56.
68. Gilliland, S., Forrest, L., Carre, H., Jenkins, A., **Berry, N.**, Martin, J., Minor, P. Schepelmann, S. (2012). Investigation of porcine circovirus contamination in human vaccines. *Biologicals*, 40(4):270-7.
67. Clarke, S., **Berry, N.**, Ham, C., Alden, J., Almond, N., Ferguson, D. (2012). Neuropathology of wild-type and *nef*-attenuated T cell tropic simian immunodeficiency virus (SIVmac32H) and macrophage tropic neurovirulent SIVmac17E-Fr in cynomolgus macaques *J NeuroVirology* 18(2):100-12.
66. de Silva, T., Aasa-Chapman, M., Cotten, M., Hué, S., Robinson, J., Bibollet-Ruche, F., Sarge-Njie, R., **Berry, N.**, Jaye, A., Whittle, H., Rowland-Jones, S., Weiss, R (2012). Potent autologous and heterologous neutralizing antibody responses occur in HIV-2 infection across a broad range of infection outcomes. *J Virology* 86(2):930-946.

65. **Berry, N.**, Marzetta, F., Towers, G.J., Rose, N.J. (2012) Diversity of TRIM5 α and TRIM-cyp sequences in macaque species from different geographical origins. *Immunogenetics*. 64(4):267-78
64. **Berry, N.**, Ham, C., Mee, E.T., Rose, N.J., Mattiuzzo, G., Jenkins, A., Page, M., Elsley, W., Robinson, M., Smith, D., Ferguson, D., Towers, G., Almond, N., Stebbings, R. (2011) Early potent protection against heterologous SIVsmE660 challenge following live attenuated SIV vaccination in Mauritian cynomolgus macaques. *PLoS ONE* 6(8), e23092
63. Holmes, H., **Berry, N.**, Heath, A., Morris, C. (2011). Preparation and evaluation of the 1st International Standard for the quantification of HIV-2 RNA in plasma. *J Vir Meths* 175(2):246-52.
62. **Berry, N.**, Herrera C., Cranage, M. (2011). Detection, quantification and characterisation of HIV/SIV. *Methods in Molecular Medicine*. Ed: *Stevenson, J.* 665:133-60
61. Li B, **Berry N**, Ham C, Ferguson D, Smith D, Hall J, Page M, Quartey-Papafio R, Elsley W, Robinson M, Almond N, Stebbings R. (2011). Vaccination with live attenuated simian immunodeficiency virus causes dynamic changes in intestinal CD4+CCR5+ T cells. *Retrovirology*. 8(1):8.

2005-2010

60. Ham, C., Srinivasan, P., Thorstensson, R., Vershoor, E., Vagrouche, Z., Titti, F., Almond, N., **Berry, N.** (2010). An International multi-centre study to assess a panel of reference materials for SIV RNA quantification. *J Clin Micro*. 48(7):2582-5.
59. Mee, E., **Berry, N.**, Ham, C., Aubertin, A-M., Hall, J., Stebbings, R., Page, M., Almond, N., Rose, N.J. (2010). *Mhc* haplotype M3 is associated with early control of SHIVsbg infection in Mauritian cynomolgus macaques. *Tissue antigens* 76:223-229.
58. Schim van der Loeff, M., Larke, N., Kaye, S., **Berry, N.**, Ariyoshi, K., Alabi, A., Van Tienen, C., Leglidowicz, A., Njie, R.S., da Silva, Z., Jaye, A., Vincent, T., Rowland Jones, S., Aaby, P., Jaffar, S., Whittle, H. (2010). Undetectable plasma viral load predicts normal survival in HIV-2-infected people in a West African village. *Retrovirology* 19; 7:46
57. Mee, E., **Berry, N.**, Ham, C., Sauermann, U., Le Grand, R., Titti, F., Almond, N., Rose, N. MHC haplotype H6 is associated with sustained control of SIVmac251 infection in Mauritian cynomolgus macaques. (2009). *Immunogenetics* 61; 327-339.
56. Wang, Y., Bergmeier, L.A., Stebbings, R., Seidl, T., Whittall, T., Singh, M., **Berry, N.**, Almond, N., Lehner, T. (2009). Mucosal immunization in macaques upregulates the innate APOBEC 3G anti-viral factor in CD4(+) memory T cells. *Vaccine* 27:870-881
55. Morris, C., **Berry, N.**, Heath, A., Holmes, H. (2008). An International collaborative study to establish a replacement WHO International standard for HIV-1 RNA nucleic acid assays. *Vox Sanguinis*. 95; 218-225.
54. Cranage, M., Sharpe, S., Herrera, C., Cope, A., Dennis, M., **Berry, N.**, Ham, C., Heeney, J., Anton, P., McGowan, I., Shattock, R. (2008). Resistance to SIV rectal transmission and priming of T cell responses after local pre-exposure prophylaxis with tenofovir gel. *PLoS Medicine* 5 e 157.
53. **Berry, N.**, Stebbings, R., Ferguson, D., Ham, C., Alden, J., Brown, S., Jenkins, A., Clayton, A., Lines, J., Davis, L., Page, M., Hull, R., Stott, J., Almond, N. (2008). Resistance to superinfection of a vigorously replicating, uncloned stock of simian immunodeficiency virus (SIVmac251) stimulates replication of a live attenuated virus vaccine (SIVmacC8). *J. Gen Virol*. 89: 2240-2251.

52. Ferguson, D., Wade-Evans, A., Elsley, W., Sangster, R., Silvera, P., MacManus, S., Davis, G., Corcoran, T., **Berry, N.**, Brown, S., Cowie, J., Sethi, M., Hull, R., Stebbings, R., Stott, E., Almond, N. (2007). Preparation and characterisation of new challenge stocks of SIVmac32H/J5 following rapid passage of virus *in vivo*. *J Med Primatol.* 36: 131-142.

51. **Berry, N.**, Stebbings, R., Brown, S., Ahmed, R., Thorstensson, R., Christian, P., Elsley, W., Hull, R., Lines, J., Wade-Evans, A., Stott, E.J., Almond, N. (2007). Immunological responses and outcome of vaccination with recombinant modified vaccinia virus Ankara expressing structural and regulatory transgenes of simian immunodeficiency virus (SIVmac251/J5M) and modulatory effects of SIV replication upon challenge. *J Med Primatol.* 36: 80-94.

50. Corrigan, GE., Hansson, E., Mörner, A., **Berry, N.**, Källander, C., Thorstensson, R. (2006). Reverse transcriptase viral load correlates with RNA in SIV/SHIV infected macaques. *AIDS Res Hum Ret.* 22: 917-923.

2000-2005

49. **Berry, N.**, Jenkins, A., Martin, J., Davis, C., Wood, D., Schild, G., Bottiger, M., Holmes, H., Minor, P., Almond, N. (2005). Mitochondrial DNA and retroviral RNA analyses of archival oral poliovirus materials: evidence of macaque nuclear sequences confirms substrate identity. *Vaccine.* 23: 1639-1648.

48. Stebbings, R., **Berry, N.**, Waldmann, H., Bird, P., Hale, G., Stott, J., North, D., Hull, R., Hall, J., Lines, J., Brown, S., D'Arcy, N., Davis, L., Edwards, C., Ferguson, D., Allen, J., Almond, N. (2005). CD8+ lymphocytes do not mediate early protection against superinfection by inoculation with a live attenuated simian immunodeficiency virus. *J Virol.* 79:12264-12272.

47. Jaffar, S., Schim van der Loeff, M., Eugen-Olsen, J., Vincent, T., Sarje-Njie, R., Ngom, P-T., Meyer, M., **Berry, N.**, Aaby, P., Whittle, H. (2005). Immunological predictors of survival in HIV-2 infected rural villagers in Guinea-Bissau. *AIDS Res Hum Ret.* 21: 560-564.

46. Stebbings, R., **Berry, N.**, Stott, J., Hull, R., Walker, B., Lines, J., Elsley, W., Brown, S., Wade-Evans, A., Davis, G., Cowie, J., Sethi, M., Almond, N. (2004). Vaccination with live attenuated simian immunodeficiency virus for 21 days protects against superinfection. *Virology.* 330: 249-260.

45. Sharpe, S., Cope, A., Dowall, S., **Berry, N.**, Ham, C., Heeney, J., Hopkins, D., Easterbrook, L., Dennis, M., Almond, N., Cranage, M. (2004) Macaques infected long-term with attenuated simian immunodeficiency virus (SIVmac) remain resistant to superinfection despite declining cytotoxic T lymphocyte responses to an immunodominant epitope. *J Gen Virol.* 85: 2591-2602

44. Leuchte, N, **Berry, N.**, Köhler, B., Almond, N., LeGrand, R., Thorstensson, R., Titti, F., Sauermann, U. (2004). *MhcDRB*-sequences from cynomolgus macaques (*Macaca fascicularis*) of different origin. *Tissue Antigens* 63: 529-537.

43. Ariyoshi, K., **Berry, N.**, Cham, F, Jaffar S, Schim van der Loeff, M, Jobe, O, N'Gom, PT, Larsen O, Andersson S, Aaby P, Whittle H. (2004). Quantification of Human T-Lymphotropic Virus Type I (HTLV-I) proviral load in a rural West African population: no enhancement of Human Immunodeficiency Virus Type-2 pathogenesis but HTLV-1 proviral load relates to mortality. *J Infectious Disease* 188: 1648-1641.

42. Alabi A, Jaffar S, Ariyoshi K, Blanchard T, Schim van der Loeff M, Sabally S, Sarge-Njie R, Ngum PT, **Berry N**, Whittle H. (2003). Plasma viral load, CD4 cell percentage, HLA and survival of HIV-1, HIV-2, and dually infected Gambian patients. *AIDS.* 17 :1513-20.

41. Padua, E, Jenkins, A., Bootman, J., Paixo, M., Almond, N, **Berry, N.** (2003). Natural variation of the *nef* gene in human immunodeficiency virus type 2 infections in Portugal. *J Gen Virol* 84 : 1287-1299.

40. Baylis, S., Shah, N., Jenkins, A., **Berry, N.**, Minor, P. (2003). Simian cytomegalovirus and contamination of oral poliovirus vaccines. *Biologicals* 31: 63-73.
39. Clarke, S, Almond, N, **Berry, N.** (2003). Simian immunodeficiency virus *nef* gene regulates the production of 2-LTR circles *in vivo*. *Virology*. 306: 100-108.
38. **Berry, N.J.**, Jaffar, S., Schim van der Loeff, M., Ariyoshi, K., Harding, E., N'Gom, P., Dias, F., Wilkins, A., Ricard, D., Aaby, P., Tedder, R., Whittle, H. (2002). Low level viraemia and high CD4% predict normal survival of a cohort of HIV-2-infected villagers. *AIDS Res Hum Ret.* 18: 1167-1173.
37. Stebbings R, Almond N, Stott E, Wade-Evans A, **Berry N**, Hull R, Lines J, Silvera P, Sangster R, Corcoran T, Rose J, Walker KB. (2002). Mechanisms of protection induced by attenuated Simian Immunodeficiency Virus. V: No anamnestic cytokine response to re-challenge. *Virology*. 296: 338-353.
36. Wade-Evans, AM, Stott, J., Hanke, T., Stebbings, R., **Berry, N.**, Lines, J., Sangster, R., Silvera, P., Walker, B., McManus, S., Davis, G., Cowie, J., Arnold, C., Hull, R., Almond, N. (2001). Specific proliferative T-cell responses and antibodies elicited by vaccination against simian immunodeficiency virus Nef do not confer protection against virus challenge. *AIDS Res Hum Ret.* 17: 1517-1526.
35. Smith, N., Shaw, T., **Berry, N.**, Vella, C., Okorafor, L., Taylor, D., Ainsworth, J., Choudhury, A., Daniels, R., El-Gadi, S., Fakoya, A., Moyle, G., Oxford, J., Ramlingham, G., Tedder, R., O'Shea, S., De Ruiter, A., Breuer, J. (2001). Antiretroviral therapy for HIV-2 infected patients. *J Infection.* 42: 126-133.
34. **Berry N**, Davis C, Jenkins A, Wood D, Minor P, Schild, G., Bottiger M, Holmes H, Almond N. (2001) Vaccine safety: Analysis of oral polio vaccine CHAT stocks. *Nature* 410: 1046-1047.
33. **Berry, N.J.**, Ariyoshi, K., Balfe, P., Tedder, R.S, Whittle, H. (2001). Sequence specificity of the human immunodeficiency virus type 2 (HIV-2) Long Terminal Repeat U3 region *in vivo* allows subtyping of the principal HIV-2 viral subtypes A and B. *AIDS Res Hum Ret.* 17: 263-267.

1995-2000

32. Ariyoshi, K., Jaffar, S., Alabi, A., **Berry, N.J.**, Schim van der Loeff, M., Sabally, S., Ngom, P.T., Corrah, T., Tedder, R.S., Whittle, H. (2000). Plasma RNA viral load predicts the rate of CD4 T cell decline and death in HIV-2-infected patients in West Africa. *AIDS*, 14: 339-344.
31. MRC/Gambia Government/UCL working group on mother-to-child transmission of HIV (2000). Maternal plasma viral RNA levels determine marked differences in mother-to-child transmission rates of HIV-1 and HIV-2 in The Gambia. *AIDS* 14: 441-448.
30. **Berry, N.J.**, Tedder, R.S. (1999). HIV-1 and HIV-2 Molecular Diagnosis. *In: AIDS and the New Viruses. Ch13, 207-222. Eds: Weiss, R.A. Dalglish, G. Academic Press*
29. Bennett, J.M., Kaye, S., **Berry, N.J.**, Tedder, R. (1999). A quantitative PCR method for the assay of HIV-1 provirus load in peripheral blood mononuclear cells. *J. Virol. Meths.* 83:11-20.
28. Jobe, O., Ariyoshi, K., Marchant, A., Sabally, S., Corrah, T., **Berry, N.J.**, Jaffar, S., Whittle, H. (1999). Proviral load and immune functions in blood and lymph node during HIV-1 and HIV-2 infection. *Clinical and Experimental Immunology.* 116: 474-478.
27. Ariyoshi, K., Schim van der Loeff, M., **Berry, N.J.**, Jaffar, S., Whittle, H. (1999). Plasma HIV viral load in relation to seasonal *plasmodium falciparum* malaria. *AIDS.* 13: 1145-1146.

26. **Berry, N.J.**, Ariyoshi, K., Jaffar, S., Sabally, S., Corrah, T., Tedder, R., Whittle, H. (1998). Low peripheral blood viral HIV-2 RNA in individuals with high CD4 percentage differentiates HIV-2 from HIV-1 infection. *J. Hum. Virol.* 1: 457-468.
25. Ariyoshi, K., Cham, F., **Berry, N.**, Harding, E., Sabally, S., N'Gom, P.T., Ishikawa, K., Jaffar, S., Corrah, T., Tedder, R., Whittle, H. (1998). Diagnosis of HIV-1 and HIV-2 dual infection using dilution analysis of type-specific antibody. *AIDS* 12: 2504-2505.
24. Smith, N., Kennedy, J., Bewley, S., O'Shea, du Mont, S., Breuer, J., **Berry, N.**, Breuer, J., DeRuiter, A. (1998). HIV-2 in pregnancy, to treat or not to treat? *Int. J. STD. AIDS.* 9: 246.
23. Aaby, P., Ariyoshi, K., Buckner, M., Jensen, H., **Berry, N.**, Wilkins, A., Ricard, D., Larsen, O., Dias, F., Melbye, M., Whittle, H (1996). Age of wife as a major determinant of male-to-female transmission of HIV-2 infection: a community study from rural West Africa. *AIDS.* 10: 1585-1590.
22. Ariyoshi, K., **Berry, N.J.**, Wilkins, A., Ricard, D., Aaby, P., Naucner, A., Ngom, P.T., Jobe, O., Jaffar, S., Dias, F., Tedder, R.S., Whittle, H. (1996). A community-based study of HIV-2 proviral load in a rural village in West Africa. *J. Infectious Disease.* 173: 245-248.
21. **Berry, N.J.** (1996). Quantification of viral DNA by a nested PCR radiometric incorporation assay. In: PCR: *Essential techniques*. 22-23 (Ed: J. Burke). Wiley and Sons, New York and Bios Scientific publishers (Oxford).

1990-1995

20. **Berry, N.J.** (1995). HIV-2 infection. In Compendium of Infectious Diseases. Eds: Bentley, A., Davidson, R., Heyderman, R. and Zuckerman, M. *Curr. Med. Lit.* Royal Society of Medicine. 120-124.
19. Ariyoshi, K., Cham, F., **Berry, N.J.**, Corrah, T., Whittle, H. (1995). HIV-2-specific cytotoxic T-cell activity is inversely related to proviral load. *AIDS.* 9: 555-559.
18. **Berry, N.J.**, Ariyoshi, K., Jobe, O., Ngom, P.T., Corrah, T., Wilkins, A., Whittle, H., Tedder, R. (1994). HIV type 2 proviral load measured by quantitative polymerase chain reaction correlates with CD4+ lymphopaenia in HIV type 2-infected individuals. *AIDS. Res. Hum. Ret.* 10: 1031-1037.
17. **Berry, N.J.** (1994). HIV-2 infection. *Curr. Med. Lit.* Royal Society of Medicine. 3:35-39
16. **Berry, N.J.**, Pepin, J., Gaye, I., Parker, D., Jarvill, M., Wilkins, A., Whittle, H., Tedder, R. (1993). Competitive EIA for anti-HIV-2 detection in The Gambia: Use as a screening assay and to identify possible dual infections. *J. Med. Virol.* 39: 101-108.
15. Mills, H., Burns, N., **Berry, N.J.**, Jones, I. (1992). Simple and efficient production of the core antigens of HIV-1, HIV-2 and simian immunodeficiency virus using pGEX expression vectors in *Escherichia coli*. (letter). *AIDS.* 6: 437-439.
14. Whittle, H., Egboga, A., Todd, J., Corrah, T., Wilkins, A., Demba, E., Morgan, G., Rolfe, M., **Berry, N.J.**, Tedder, R. (1992). Clinical and laboratory predictors of survival in Gambian patients with symptomatic HIV-1 or HIV-2 infection. *AIDS.* 6: 685-689.
13. Pepin, J., Dalby, M., Gaye, I., **Berry, N.J.**, Whittle, H. (1991). Long-term follow-up of subjects with an indeterminate HIV-2 Western blot. *AIDS.* 5: 1274-1275.
12. **Berry, N.J.**, Salker, R., Contreras, M., Barbara, J., Tedder, R. (1991). A comparison of four enzyme immunoassays for the simultaneous detection of HIV-1 and HIV-2-specific antibody. *J. Virol. Meths.* 34: 91-100.

11. Wilkins, A., Hayes, R., Alonso, P., Baldeh, S., **Berry, N.J.**, Cham, K., Hughes, A., Jaiteh, K., Oelman, B., Tedder, R., Whittle, H. (1991): Risk factors for HIV-2 infection in The Gambia. *AIDS*. 5: 1127-1132.

10. Pepin, J., Dunn, D., Gaye, I., Alonso, P., Egboga, A., Tedder, R., Piot, P., **Berry, N.J.**, Schellenberg, D., Whittle, H., Wilkins, A. (1991). HIV-2 infection among prostitutes working in The Gambia: association with serological evidence of genital ulcer diseases and with generalised lymphadenopathy. *AIDS*. 5: 69-75.

1985-1990

9. **Berry, N.J.**, MacDonald Burns, D., Wannamethee, G., Grundy, J.E., Lui, S.F., Prentice, H.G.; Griffiths, P.D. (1988). Seroepidemiologic studies on the acquisition of antibodies to cytomegalovirus, herpes simplex virus and human immunodeficiency virus among general hospital patients and those attending a clinic for sexually transmitted diseases. *J. Med. Virol.* 24:385-393.

8. Lever A.M., Lewis, D.M., Bannister, B.A., Fry, M, **Berry, N.J.** (1988). Interferon production in post-viral fatigue syndrome. *Lancet*. 2: 101.

7. Grundy, J.E., Lui, S.F., Super, M., **Berry, N.J.**, Sweny, P., Fernando, O.N., Moorhead, J., Griffiths, P.D. (1988). Symptomatic cytomegalovirus infection in seropositive kidney recipients: re-infection with donor virus rather than reactivation of recipient virus. *Lancet*. 2: 132-135.

6. Barbara, J.A., Mouldsdale, H., Brown, S., Griffiths, P.D., **Berry, N.J.**, Contreras, M. (1987). Modified latex agglutination test for anti-cytomegalovirus, suitable for pre-transfusion screening. *J.Clin.Pathol.* 40: 115-116.

5. Wimperis, J.Z., **Berry, N.J.**, Prentice, H.G., Grundy, Lever, A.M., Griffiths, P.D., Brenner, M.K. (1987). Regeneration of humoral immunity to herpes simplex virus following T-cell-depleted allogeneic bone marrow transplantation. *J.Med.Virol.* 23:93-99.

4. **Berry, N.J.**, Grundy, J.E., Griffiths, P.D. (1987). Radioimmunoassay for the detection of IgG antibodies to herpes simplex virus and its use as a prognostic indicator of HSV excretion in transplant recipients. *J. Med. Virol.* 21: 147-154.

3. Wimperis, J.Z., **Berry, N.J.**, Brenner, M.K., Grundy, J.E., Hoffbrand, A.V., Griffiths, P.D., Prentice, H.G. (1986). Production of anti-cytomegalovirus antibody following T-cell depleted bone marrow transplant. *Br. J. Haematol.* 63: 659-664.

2. **Berry, N.J.**, Grundy, J.E., Griffiths, P.D. (1986). An improved radioimmunoassay method for the detection of IgG antibodies against cytomegalovirus. *J. Virol. Meths.* 13: 343-350.

1. Panjwani, D.D., Ball, M.G., **Berry, N.J.**, Wimperis, J.Z., Blacklock, H.A., Prentice, H.G., Hoffbrand, A.V., Griffiths, P.D. (1985). Virological and serological diagnosis of cytomegalovirus infection in bone marrow allograft recipients. *J. Med Virol.* 16: 357-365.