

Associate Prof Sylvie Alonso's publications

1. Kavishna R, Kang TY, Vacca M, Chua YL, Park HY, TAN PS, Chow VTK, Lahoud M, Alonso S (2022). A Single Shot Vaccine Approach for the Universal Influenza A Vaccine Candidate M2e- **Proc. Natl. Acad. Sci USA** 119 (13) e2025607119 doi 10.1073/pnas.2025607119
2. Yeo H, Chong WC, Chen WE, Lim ZQ, Ng QY, Yan B, Chu JJH, Chow VTK, Alonso S (2022). A single amino acid substitution in structural protein VP2 abrogates the neurotropism of Enterovirus A-71 in mice. **Frontiers in Microbiology** 17 March 2022 <https://doi.org/10.3389/fmicb.2022.821976>
3. Foo J, Bellot G, Pervaiz S, S Alonso (2022). Mitochondria-mediated oxidative stress during viral infection. **Trends in Microbiology**- Jan18:S0966-842X(21)00318-8 doi: <https://doi.org/10.1016/j.tim.2021.12.01>
4. Cheang YZN, Ting DHR, Koh HQV, Alonso S (2021). *In vitro* and *in vivo* efficacy of Metformin against dengue. **Antiviral Res.** 195:105186. doi: 10.1016/j.antiviral.2021.105186.
5. Ang Pei Yi, Chong WHC, Alonso S (2021). Viral determinants that drive Enterovirus-A71 fitness and virulence. **Emerg. Microbes Infect.** 10(1):713-724. doi : 10.1080/22221751.2021.1906754
6. Lim ZQ, Ng QY, OO Y, Chu JJH, Ng SY, Sze SK, Alonso S (2021). Enterovirus-A71 exploits peripherin and Rac1 to invade the central nervous system. **EMBO Rep** 22(6):e51777. doi: 10.15252/embr.202051777
7. Ngan JYG, Pasunooti S, Tse W, Meng W, Ngan SFC, Jia H, Lin JQ, Ng SW, Jaafa MT, Cho S LS, Lim J, Koh HQV, Abdul Ghani N, Pethe K, Sze SK, Lescar J, S Alonso (2021). HflX is a GTPase that controls hypoxia-induced replication arrest in slow growing mycobacteria. **Proc. Natl. Acad. Sci USA** 118(12): e2006717118. doi : 10.1073/pnas.2006717118
8. Idris F, Ting DHR, Alonso S (2021). An update on dengue vaccine development, challenges and future perspectives. (Invited review) **Expert Op Drug Discov** 25:1-12. doi: 10.1080/17460441.2020.1811675.
9. Lee PX, Ting DHR, Boey CPH, Tan ETX, Chia JZH, Idris F, Oo Y, Ong LC, Chua YL, Hapuarachchi C, Ng LC, Alonso S (2020). Relative contribution of non-structural protein 1 in dengue pathogenesis. **J. Exp. Med.** 217(9):e20191548. doi:10.1084/jem.20191548.
10. Lim ZQ, Ng QY, Ng WQJ, Mahendran V, Alonso S (2020). Recent progress and challenges in drug development to fight Hand, Foot and Mouth Disease. **Expert Opin Drug Discov. Review** 5(3):359-371. doi: 10.1080/17460441.2019.1659241.
11. Lim J, VHQ Koh, SSL Cho, B. Periaswamy, DPS. Choi, M. Vacca, PF. De Sessions, P. Kudela, W. Lubitz, G. Pastorin, and S. Alonso (2019). Harnessing the immunomodulatory properties of bacterial ghosts to boost the anti-mycobacterial protective immunity. **Frontiers Immunol.** 10:2737. doi: 10.3389/fimmu.2019.02737.
12. Periasamy P, Hutchinson PE, Chen J, Bonne I, Shahul Hameed SS, Selvam P, Hey YY, Fink K,

- Irving AT, Dutertre C-A, Baker M, Cramer G, Wang L-F, Alonso S (2019). Studies on B cells in the fruit-eating black flying fox (*Pteropus alecto*). **Frontiers Immunol.** 10:489 doi: 10.3389/fimmu.2019.00489.
13. Huber RG, Lim XN, Ng WC, Sim AYL, Poh HX, Shen Y, Lim SY, Sundstrom KB, Sun X, Aw JG, Too HK, Boey PH, Wilm A, Chawla T, Choy MM, Jiang L, de Sessions PF, Loh XJ, Alonso S, Hibberd M, Nagarajan N, Ooi EE, Bond PJ, Sessions OM, Wan Y (2019). Structure mapping of dengue and Zika viruses reveals functional long-range interactions. **Nature Comm.** 10(1):1408. doi: 10.1038/s41467-019-09391-8.
 14. Chan K.W.K., S. Watanabe, J.Y. Jin, J. Pompon, D. Teng, S. Alonso, D. Vijaykrishna, S.B. Halstead, J. Marzinek, P.J. Bond, B. Burla, F. Torta, M.R. Wenk, E.E. Ooi, S. Vasudevan (2019). A T164S mutation in the dengue virus NS1 protein is associated with greater disease severity in mice. **Sci Transl Med.** 11(498). pii: eaat7726. doi: 10.1126/scitranslmed.aat7726.
 15. Budigi Y, Ong EZ, Robinson LN, Ong LC, Rowley KJ, Winnett A, Tan HC, Hobbie S, Shriver Z, Babcock GJ, Alonso S, Ooi EE (2018). Neutralization of antibody-enhanced dengue infection by VIS513, a pan serotype reactive monoclonal antibody targeting domain III of the dengue E protein. **PLOS ntd.** 12(2):e0006209. doi: 10.1371/journal.pntd.0006209.
 16. Too IHK, Bonne I, Tan EL, Chu JHJ, Alonso S (2018). Prohibitin plays a critical role in Enterovirus 71 neuropathogenesis. **PLOS pathogens** 14(1):e1006778. doi: 10.1371/journal.ppat.1006778.
 17. Lam JH, Chua YL, Lee PX, Martínez Gómez J, Ooi EE, Alonso S (2017). Dengue vaccine-induced CD8⁺ T cell immunity confers protection in the context of enhancing, interfering maternal antibodies. **J. Clin. Invest. Insights** 2(24). pii: 94500. doi: 10.1172/jci.insight.94500.
 18. Park HY, Tan PS, Kavishna R, Ker A, Lu J, Chan CEZ, Hanson BJ, MacAry PA, Caminschi I, Shortman K, Alonso S, Lahoud M. (2017). Enhancing vaccine antibody responses by targeting Clec9A on dendritic cells. **npg Vaccine** 2:31. doi: 10.1038/s41541-017-0033-5.
 19. Kalia NP, Hasenoehrl EJ, Ab Rahman NB, , Ang ML, Koh VH, Sajorda DR, Hards K, Grüber G, Alonso S, Cook GM, Berney M, Pethe K (2017). Exploiting the synthetic lethality between terminal respiratory oxidases to kill Mycobacterium tuberculosis and clear host infection. **Proc Natl. Acad. Sc. USA** 114(28):7426-7431. doi: 10.1073/pnas.1706139114.
 20. Ang MLT, Zainul Rahim SZ, de Sessions PF, Lin W, Koh V, Pethe K, Hibberd ML, Alonso S (2017). EthA/R-independent killing of Mycobacterium tuberculosis by ethionamide. **Frontiers Microbiol** 8 :710. doi :10.3389/fmicb.2017.00710
 21. Too IHK, Bonne I, Tan EL, Chu JHJ, Alonso S (2017). Prohibitin plays a critical role in Enterovirus 71 neuropathogenesis. **PLOSpathogens** *In press*.
 22. Lam JH, Chua YL, Lee PX, Martínez Gómez J, Ooi EE, Alonso S (2017). Dengue vaccine-induced CD8⁺ T cell immunity confers protection in the context of enhancing, interfering maternal antibodies. **J. Clin. Invest. Insights** *In press*.
 23. Lee PX, Ong LC, Libau EA, S Alonso (2016). Relative contribution of dengue IgG antibodies acquired during gestation or breastfeeding in mediating dengue disease enhancement and protection in type I interferon receptor-deficient mice. **PLOSntd.** 10(6):e0004805.

24. Martínez Gómez J*, Ong LC*, Lam JH, Aman SAB, Libau EA, Lee PX, St John AL, Alonso S (2016). Maternal antibody-mediated disease enhancement in type I interferon-deficient mice leads to lethal disease associated with liver damage. **PLoSntd** 10(3):e0004536. * first co-authors.
25. Robinson LN, Tharakaraman K, Rowley KJ, Costa VV, Chan KR, Wong YH, Ong LC, Tan HC, Koch T, Cain D, Kirloskar R, Viswanathan K, Liew CW, Tissire H, Ramakrishnan B, Myette JR, Babcock GJ, Sasisekharan V, Alonso S, Chen J, Lescar J, Shriver Z, Ooi EE, Sasisekharan R (2015) Structure-Guided Design of an Anti-dengue Antibody Directed to a Non-immunodominant Epitope. **Cell**, 162(3): 493-504.
26. Deng CL, Yeo H, Ye HQ, Shang BD, Gong P, Alonso S, Shi PY, and Zhang B (2014). Inhibition of enterovirus 71 by adenosine analog NITD008. **J. Virol.** 88(20):11915-23. doi: 10.1128 (IF 5.308).
27. Ang LTM, Zainul Rahim SZ, Guanghou S, Dianišková P, Madacki J, Lin W, Koh V, Martinez Gomez JM, Sudarkodi S, Bendt A, Wenk M, Mikušová K, Korduláková J, Pethe K and Alonso S (2014). An ethA/R-deficient *Mycobacterium bovis* BCG mutant displays increased adherence to mammalian cells and greater persistence in vivo which correlate with altered mycolic acids composition. **Infect & Immun.** 82(5):1850-1959 (IF 3.9).
28. Ng JKW, Zhang SL, Tan HC, Yan B, Martinez Gomez J, Tan WY, Lam JH, Tan GKX, Ooi EE, Alonso S. (2014). First experimental In vivo Model of enhanced Dengue disease severity through maternally acquired heterotypic Dengue antibodies. **PLOS Pathogens** 10(4):e1004031. doi: 10.1371.
29. Ong LC, Ang E, Alonso S* and Y Zhang* (2014) Bacterial Imaging with photostable upconversion fluorescent nanoparticles. **Biomaterials**. Accepted for publication (IF 7.6). * co-corresponding authors.
30. Martínez Gómez JM, Koh V, Yan B, Lin W, Ang M, Zainul Rahim SZ, Pethe K, Schwarz H, and S Alonso (2014). Role of the CD137 ligand (CD137L) signaling pathway during *Mycobacterium tuberculosis* infection. **Immunobiology** 219 :78-86. (IF 3.1).
31. Lim RFA, Ng KWJ, Loch C, and S Alonso (2014). Protective role of adenylate cyclase in the context of a live pertussis vaccine candidate. **Microbes & Infect.** 16:51-60 (IF 2.8).
32. Pethe K, Jang J, Kang S, Park S, Ahn S, Jiricek J, Jung J, Jeon HK, Cechetto J, Christophe T, Kempf M, Jackson M, Lenaerts AJ, Pham H, Jones V, Seo MJ, Lee S, Kim YM, Seo Jeong M, Seo S, Ko Y, Choi I, Kim R, Kim S, Lim SB, Yim SA, Nam J, Kang H, Kwon H, Oh CT, Cho Y, Jang Y, Kim J, Chua A, Tan BH, Nanjundappa MB, Rao SPS, Barnes WS, Wintjens R, Walker JR, Alonso S, Kim J, Oh S, Oh T, Han SJ, No Z, Lee J, Brodin P, Cho SN, Nam K, Bifani P, Kim J (2013) Discovery of Q203, a potent clinical candidate for the treatment of tuberculosis. **Nature Med.** 19(9):1157-60 (IF 22.86).
33. Li Y, Chen Q, Zheng D, Yin L, Chionh YH, Wong LH, Tan SQ, Tan TC, Chan JK, Alonso S, Dedon PC, Lim B, Chen J (2013). Induction of Functional Human Macrophages from Bone Marrow Promonocytes by M-CSF in Humanized Mice. **J Immunol.** 191(6):3192-9. (IF 5.52)

34. Chionh Y, Ho CH, Pruksakorn D, Babu R, Ng C, Hia F, McBee M, Su D, Pang YL, Gu C, Dong H, Prestwich E, Shi PY, Preiser P, Alonso S, Dedon P (2013). A multi-dimensional platform for the purification of non-coding RNA species. **Nucleic Acids Res.** 41(17):e168 (IF 8.27)
35. Tan KXG*, Ng KWJ*, Tan KW, Angeli V, Shabbir MM, Ooi EE, and S. Alonso (2013). Hypertonic Saline Reduces Vascular Leakage in a Mouse Model of Severe Dengue. **PLOSone** e61621. * first co-authors. (IF 4.351)
36. Tang Q, D Jiang, S Alonso, A Pant, JM Martínez Gómez, DM Kemeny, L Chen, and H Schwarz (2013). CD137 ligand signaling enhances myelopoiesis during infections. **Eur. J. Immunol.** 43(6):1555-67 (IF 4.970)
37. Phong WY, Lin WW, Rao SPS, Dick T, Alonso S* and K. Pethe* (2013). Characterization of phosphofructokinase activity in *Mycobacterium tuberculosis* reveals that a functional glycolytic carbon flow is necessary to limit the accumulation of toxic metabolic intermediates under hypoxia. **PLOSone** 8(2):e56037. *co-corresponding authors. (IF 4.351).
38. Khong W, Yeo H, and S Alonso (2012). Enterovirus 71 : Pathogenesis, control and models of disease. Review. **Future Virology** 7(10) : 989-1004 (IF 1.2).
39. Li C, J Liu, S Alonso, F Li and Y Zhang (2012). Upconversion nanoparticles for sensitive and in-depth detection of Cu²⁺ Ions. **Nanoscale** 4(19):6065-71 (IF 5.9).
40. Li R, Cheng C, Chong SZ, Lim ARF, Goh YF, Loch C, Kemeny DMK, Angeli V, Wong WSF and S Alonso (2012). Attenuated *B. pertussis* BPZE1 protects against allergic airway inflammation and contact dermatitis in mouse models. **Allergy** 67(10):1250-8 (IF 6.27) Tier 1.
41. Zou G, P Kukkaro, SM Lok, JKW Ng, GK Tan, S Alonso, PA MacAry and PY Shi (2012). Resistance analysis of an antibody that selectively inhibits dengue virus serotype-1. **Antiviral Res.** 95(3):216-23 (IF 4.3) Tier 2.
42. Lin WW, Mathys V, Ang ELY, Koh VHQ, Martínez Gómez JM, Ang MLT, Zainul Rahim SZ, Tan MP, Pethe K and S Alonso (2012). The urease activity represents an alternative pathway for *Mycobacterium tuberculosis* nitrogen metabolism. **Infect. Immun.** 80(8):2771-9 (IF 3.9) Tier 1.
43. Teoh EE*, Kukkaro P*, Teo EW, Lim APC, Tan TT, Yip A, Schul W, Aung M, Kostyuchenko VA, Leo YS, Chan SH, Smith KGC, Chan AHY, Zou G, Ooi EE, Kemenu DM, Tan GK, Ng JKW, Ng ML, Alonso S, Fisher D, Shi PY, Lok SM and Macary PA (2012). Structural Basis for Serotype-Specific Neutralization of Dengue Virus by a Natural Human Antibody. **Sci. Transl. Med.** 4(139):139ra83 (IF 7.8).
44. Tan KS, Lee KO, Low KC, Gamage AM, Liu Y, Tan G, Koh V, Alonso S and Gan YH (2012). Glutathione deficiency in Type 2 diabetic patients contributes to defective IL-12 production and bacterial control. **J. Clin. Invest.** 122(6):2289-300 (IF 14.15) Tier 1.

45. Khong W, Yan B, Yeo H, Tan EL, Lee JJ, Ng JKW, Chow VT and S Alonso (2012). A non mouse-adapted Enterovirus 71 (EV71) strain exhibits neurotropism causing neurological manifestations in a novel mouse model of EV71 infection. **J. Virol.** 86(4):2121-2131 (IF 5.308) Tier 1.
46. Lim XF, Q Jia, W Khong, B Yan, B Premanand, S. Alonso, V Chow and J Kwang (2012). Characterization of an isotype-dependent monoclonal antibody against linear neutralizing epitope effective for prophylaxis of Enterovirus 71 infection. **PLOSone** 7: e29751 (IF 4.351).
47. Tan G, JKW Ng, AWY Lim, KP Yeo, V Angeli and S Alonso (2011). Subcutaneous infection with non-mouse adapted dengue virus D2Y98P strain induces systemic vascular leakage in AG129 mice. **Ann Acad Med Singap** 40(12):523-530 (IF 1.2) Untiered.
48. Li R*, A Lim* and S Alonso (2011). Attenuated *Bordetella pertussis* BPZE1 as a live vehicle for heterologous vaccine antigens delivery through the nasal route. Invited Minireview. **Bioeng. Bugs.** 2(6):315-9.
49. Chan CTY, YH Chionh, CH Ho, KS Lim, R Babu, E Ang, WW Lin, S Alonso and PC Dedon (2011). Identification of N6,N6-Dimethyladenosine in transfer RNA from *Mycobacterium bovis* Bacille Calmette-Guérin. **Molecules** 16:5168-81 (IF 1.738) Untiered.
50. Grant D*, GK Tan*, M Qing*, JKW Ng, A Yip, G Zou, X Xie, Z Yuan, M Schreiber, W Schul, P-Y Shi and S Alonso (2011). A single amino acid in nonstructural NS4B protein confers virulence to Dengue virus in AG129 mice through enhancement of viral RNA synthesis. **J. Virol.** 85 (15):7775-87 (IF 5.308) Tier 1. * first co-authors.
51. Li R*, A Lim*, STL Ow, MC Phoon, C Loch, VT Chow and S Alonso (2011). Development of live attenuated *Bordetella pertussis* strains expressing the universal influenza vaccine candidate M2e. **Vaccine** 29:5502-11 (IF 3.6) Tier 2. * first co-authors.
52. Khong WX, Foo DGW, Trasti SL, Tan EL, and S Alonso (2011). Sustained high levels of IL-6 contribute to the pathogenesis of Enterovirus 71 in a neonate mouse model. **J. Virol.** 85(7):3067- 76 (IF 5.308) Tier 1.
53. Tan MP, Sequeira PC, Lin WW, Phong WY, Cliff P, Ng SH, Lee BH, Camacho LR, Schnappinger D, Ehart S, Dick T, Pethe K and S Alonso (2010). Nitrate respiration protects hypoxic *Mycobacterium tuberculosis* against acid and reactive nitrogen species. **PLoS one** 5(10):e13356. (IF 4.351) Untiered.
54. Li R, Lim A, Phoon MC, Narasaraju T, Ng JKW, Poh WP, Sim MK, Chow VT, Loch C and S Alonso (2010). Attenuated *Bordetella pertussis* protects against highly pathogenic influenza A viruses by dampening the cytokine storm. **J. Virol.** 84: 7105-13. (IF 5.308) Tier 1.
55. Tan GK, Ng JKW, Trasti SL, Schul W, Yip G and S Alonso (2010). A non mouse-adapted dengue virus strain as a new model of severe dengue infection in AG129 mice. **PLoS Negl. Trop. Dis.**

4:e672 (IF 4.172) Untiered.

56. Neo YL, Li R, Howe J, Hoo R, Pant A, Ho SY and S Alonso (2010). Evidence for an intact polysaccharide capsule in *Bordetella pertussis*. **Microbes & Infect.** 12(3):238-45 (IF 2.8) Tier 2.
57. Tan G and S Alonso (2009). Pathogenesis and prevention of dengue virus infection: state of the art. **Curr. Opin. Infect. Dis.** (Invited review) 22(3):302-8. (IF 4.75) Tier 2.
58. Rao SPS, Alonso S, Rand L, Dick T and K Pethe (2008). The protonmotive force is required for maintaining ATP homeostasis and viability of hypoxic, non-replicating *Mycobacterium tuberculosis*. **Proc. Natl. Acad. Sci. USA.** 105(33):11945-50 (IF 10.231) Tier 1.
59. Foo GWD, MacAry PA, Poh* CL and S Alonso* (2008). Identification of human CD4⁺ T cell epitopes on the VP1 capsid protein of Enterovirus 71. **Viral Immunol.** 21(2):215-24.* co-corresponding authors. (IF 2.03) Tier 3.
60. Sim* ACN, Lin* W, Tan GKX, Sim MST, Chow VTK and S Alonso (2008). Induction of neutralizing antibodies against dengue virus type 2 upon mucosal administration of a recombinant *Lactococcus lactis* strain expressing envelope domain III antigen. **Vaccine** 26(9):1145-54. * Equal contribution. (IF 3.6) Tier 2.
61. Ho SY, Chua SQ, Foo GWD, Locht C, Chow VTC, Poh CL and S Alonso (2008). The highly attenuated *Bordetella pertussis* BPZE1 strain as a potential live vehicle for the delivery of heterologous vaccine candidates. **Infect. Immun.** 76: 111-9. (IF 3.933) Tier 1.
62. Foo GWD, Ang RX, Alonso S, Chow VTC, Queck SH and CL Poh (2008). Identification of immunodominant VP1 linear epitope of enterovirus 71 using synthetic peptides for detecting human anti-EV71 IgG antibodies in western blot. **Clin. Microbiol. Infect.** 14: 286-8. (IF 2.679) Tier 3.
63. Foo GWD, Alonso S, Chow VTC and CL Poh (2007). Passive protection against lethal enterovirus 71 infection in newborn mice by neutralizing antibodies elicited by a synthetic peptide. **Microbes Infect.** 9: 1299-306. (IF 3.154) Tier 2.
64. Alonso S, Pethe K, Russell DG and GE Purdy (2007). Lysosomal killing of *Mycobacterium* by ubiquitin-derived peptides is enhanced by autophagy. **Proc. Natl. Acad. Sci. USA.** 104 (14): 6031-6. (IF 10.231) Tier 1.
65. Foo GWD, Alonso S, Phoon MC, Ramachandran MP, Chow V and CL Poh (2007). Identification of neutralizing linear epitopes from the VP1 capsid protein of Enterovirus 71 using synthetic peptides. **Virus Res.** 125(1): 61-8. (IF 2.562) Tier 3.
66. Alonso S, Willery E, Renauld-Mongenie G and C Locht (2005). Production of non-typeable *Haemophilus influenzae* HtrA by recombinant *Bordetella pertussis* using filamentous hemagglutinin as carrier. **Infect. Immun.** 73: 4295-301. (IF 3.933) Tier 1.

67. Pethe* K, Temmerman* S, Parra M, Alonso S, Rouanet C, Picket T, Drowalt A, Debrie AS, Delogu G, Menozzi FD, Sergheraert C, Brennan MJ, Mascart F and C Locht (2004). Methylation-dependent T cell and protective immunity to *Mycobacterium tuberculosis* heparin-binding haemagglutinin. **Nature Medecine** *equal contribution. 10: 935-41. (IF 28.878) Tier 1.
68. Pethe K, Swenson D, Alonso S, Anderson J, Wang C and DGR Russell (2004). Isolation of *Mycobacterium tuberculosis* mutants defective in the arrest of phagosome maturation. **Proc. Natl. Acad. Sci. USA**. 101: 13642-7. (IF 10.231) Tier 1.
69. Alonso* S, Coutte* L, Reveneau N, Willery E, Quatannens B, Locht C and F Jacob-Dubuisson (2003). Role of adhesin release for mucosal colonization by a bacterial pathogen. **J. Exp. Med.** 197: 735-742. *Equal contribution. (IF 13.965) Tier 1.
70. Poulain-Godefroy O, Menozzi FD, Alonso S, Vendeville C, Capron A, Locht C and G Riveau (2003). Adjuvant activity of free *Bordetella pertussis* filamentous haemagglutinin delivered by mucosal routes. **Scand. J. Immunol.** 58: 503-510. (IF 2.023) Tier 3.
71. Alonso S, Reveneau N, Pethe K, and C Locht (2002). Eighty-kilodalton N-terminal moiety of *Bordetella pertussis* filamentous haemagglutinin : adherence, immunogenicity and protective role. **Infect. Immun.** 7: 4142-4147. (IF 3.933) Tier 1.
72. Reveneau N, Alonso S, Jacob-Dubuisson F, Mercenier A and C Locht (2001). Tetanus toxin fragment C-specific priming by intranasal infection with recombinant *Bordetella pertussis*. **Vaccine** 20: 926-933. (IF 3.6) Tier 2.
73. Alonso S, Pethe K, Mielcarek N, Raze D and C Locht (2001). Role of ADP-ribosyltransferase activity of pertussis toxin in toxin-adhesin redundancy with filamentous hemagglutinin during *Bordetella pertussis* infection. **Infect. Immun.** 69: 6038-6043. (IF 3.933) Tier 1.
74. Mielcarek N, Alonso S and C Locht (2001). Nasal vaccination using live bacterial vectors. **Adv. Drug Deliv. Rev.** 51: 55-69. (IF 7.189) Tier 1.
75. Coppens I, Alonso S, Antoine R, Jacob-Dubuisson F, Renauld-Mongenie G and C Locht (2001). Production of *Neisseria meningitidis* transferrin-binding protein B by recombinant *Bordetella pertussis*. **Infect. Immun.** 69: 5440-5446. (IF 3.933) Tier 1.
76. Pethe K, Alonso S, Biet F, Brennan MJ, Locht C and FD Menozzi (2001). The heparin-binding haemagglutinin of *M. tuberculosis* is required for extrapulmonary dissemination. **Nature** 412: 190-194. (IF 29.27) Tier 1.
77. Chagneau C, Heyde M, Alonso S, Portalier R and P Laloï P (2001). External-pH-dependent expression of the maltose regulon and *ompF* gene in *Escherichia coli* is affected by the level of glycerol kinase, encoded by *glpK*. **J. Bacteriol.** 183: 5675-5683. (IF 4.167) Tier 2.
78. Antoine R, Alonso S, Raze D, Coutte L, Lesjean S, Willery E, Locht C and F Jacob-Dubuisson

(2000). New virulence-activated and virulence-repressed genes identified by systematic gene inactivation and generation of transcriptional fusions in *Bordetella pertussis*. **J. Bacteriol.** 182: 5902-5. (IF 4.167) Tier 2.

79. Alonzo S, Heyde M, Laloï P and R Portalier (1998). Analysis of the effect exerted by extracellular pH on the maltose regulon in *Escherichia coli* K-12. **Microbiology** 144: 3317-3325. (IF 3.173) Tier 2.