

Bibliography

René Bernards

Original articles:

1. Bernards, R., Little, P.F.R., Annison, F., Williamson, R., and Flavell, R.A. (1979). Structure of the human G_{γ} - A_{γ} - δ - β globin locus. *Proc. Natl. Acad. Sci. USA* **76**, 4827-4831.
2. Bernards, R., Kooter, J.M., and Flavell, R.A. (1979). Physical mapping of the globin gene deletion in ($\delta\beta$)⁰-thalassaemia. *Gene* **6**, 265-280.
3. Flavell, R.A., Bernards, R., Kooter, J.M., de Boer, E., Little, P.F.R., Annison, G., and Williamson, R. (1979). Structure of the human β -globin gene in β -thalassaemia. *Nucleic Acids Res.* **6**, 2749-2760.
4. Bernards, R., and Flavell, R.A. (1980). Physical mapping of the globin gene deletion in hereditary persistence of foetal haemoglobin (HPFH). *Nucleic Acids Res.* **8**, 1521-1534.
5. Bos, J.L., Polder, L.J., Bernards, R., Schrier, P.I., Van den Elsen, P.J., Van der Eb, A.J., and Van Ormondt, H. (1980). The 2.2 kb Elb mRNA of human Ad12 and Ad5 codes for two tumor antigens starting at different AUG triplets. *Cell* **27**, 121-131.
6. Bernards, R., Houweling, A., Schrier, P.I., Bos, J.L., and Van der Eb, A.J. (1982). Characterization of cells transformed by Ad5/Ad12 hybrid early region 1 plasmids. *Virology* **120**, 422-432.
7. Bernards, R., Schrier, P.I., Bos, J.L., and Van der Eb, A.J. (1983). Role of adenovirus types 5 and 12 early region 1b tumor antigens in oncogenic transformation. *Virology* **127**, 45-53.
8. Schrier, P.I., Bernards, R., Vaessen, R.T.M.J., Houweling, A., and Van der Eb, A.J. (1983). Expression of class I histocompatibility antigens switched off by highly oncogenic adenovirus 12 in transformed rat cells. *Nature* **305**, 771-775.
9. Bernards, R., Schrier, P.I., Houweling, A., Bos, J.L., Van der Eb, A.J., Zijlstra, M., and Melief, C.J.M. (1983). Tumorigenicity of cells transformed by adenovirus type 12 by evasion of T-cell immunity. *Nature* **305**, 776-779.
10. Bernards, R., Vaessen, M.J., Van der Eb, A.J., and Sussenbach, J. (1983). Construction and characterization of an adenovirus type 5/adenovirus type 12 recombinant virus. *Virology* **131**, 30-38.
11. Bos, J.L., Jochemsen, A.G., Bernards, R., Schrier, P.I., van Ormondt, H., and Van der Eb, A.J. (1983). Deletion mutants of region Ela of Ad12 El plasmids: Effect on oncogenic transformation. *Virology* **129**, 393-400.
12. Bernards, R., de Leeuw, M.G.W., Vaessen, M.J., Houweling, A., and Van der Eb, A.J. (1984). Oncogenicity by adenovirus is not determined by the transforming region only. *J. Virol.* **50**, 847-853.
13. Bernards, R., de Leeuw, M.G.W., Houweling, A., and Van der Eb, A.J. (1986). Role

- of the adenovirus early region 1b tumor antigens in transformation and lytic infection. *Virology* **150**, 126-139.
14. Jochemsen, A.G., Bernards, R., van Kranen, H.J., Houweling, A., Bos, J.L., and Van der Eb, A.J. (1986). Different activities of the adenovirus types Ad5 and 12 Ela regions in transformation with the EJ Ha-ras oncogene. *J. Virol.* **59**, 684-691.
 15. Friend, S.H., Bernards, R., Rogelj, S., Weinberg, R.A., Rapaport, J.M., Albert, D.M., and Dryja, T.P. (1986). Identification of a human DNA segment having properties of the gene that predisposes to retinoblastoma and osteosarcoma. *Nature* **323**, 643-646.
 16. Bernards, R., Dessain, S.K., and Weinberg, R.A. (1986). N-myc amplification causes down-modulation of MHC class I antigen expression in neuroblastoma. *Cell* **47**, 667-674.
 17. Bernards, R., Destree, A., McKenzie, S., Gordon, E., Weinberg, R.A., and Panicali, D. (1987). Effective tumor immunotherapy directed against an oncogene-encoded product using a vaccinia virus vector. *Proc. Natl. Acad. Sci. USA* **84**, 6854-6858.
 18. Stone, J.C., Crosby, J.J., Kozak, C.A., Schievella, A.R., Bernards, R., and Nadeau, J.H. (1989). The murine retinoblastoma homologue maps to chromosome 14 near Es-10. *Genomics* **5**, 70-75.
 19. Bernards, R., Schackelford, G.M., Gerber, M.R., Horowitz, J.M., Friend, S.H., Schartl, M., Bogenmann, E., Rapaport, J.M., McGee, T., Dryja, T., and Weinberg, R.A. (1989). Structure and expression of the murine retinoblastoma gene and characterization of its encoded protein. *Proc. Natl. Acad. Sci. USA* **86**, 6474-6478.
 20. Lenardo, M., Rustgi, A.K., Schievella, A.R., and Bernards, R. (1989). Suppression of MHC class I antigen expression by N-myc through enhancer inactivation. *EMBO J.* **8**, 3351-3355.
 21. Windle, J.J., Albert, D.M., O'Brien, J.M., Marcus, D.M., Disteche, C.M., Bernards, R., and Mellon, P.L. (1990) Retinoblastoma in transgenic mice. *Nature* **343**, 665-669.
 22. Dyson, N., Bernards, R., Friend, S.H., Gooding, L.R., Hassel, J.A., Major, E.O., Pipas, J.M., VanDyke, T., and Harlow, E. (1990). The large T antigens of many polyoma viruses are able to form complexes with the retinoblastoma protein. *J. Virology* **64**, 1353-1356.
 23. Akeson, R., and Bernards, R. (1990). N-myc downregulates NCAM expression in rat neuroblastoma. *Mol. Cell. Biol.* **10**, 2012- 2016.
 24. O'Brien, J.M., Marcus, D.M., Bernards, R., Carpenter, J.L., Windle, J.J., Mellon, P., and Albert, D.M. (1990). A transgenic mouse model for trilateral retinoblastoma. *Arch. Ophthalmol.* **108**, 1145-1151.
 25. Rustgi, A.K., Van 't Veer, L.J., and Bernards, R. (1990). Two genes encode factors with NF- κ B-and H2TF1-like DNA-binding properties. *Proc. Natl. Acad. Sci. USA* **87**, 8707-8710.
 26. Bernards, R. (1991). N-myc disrupts protein kinase C-mediated signal transduction in neuroblastoma. *EMBO J.* **10**, 1119-1125.
 27. Rustgi, A.K., Dyson, N., and Bernards, R. (1991). Amino-terminal domains of c-myc

- and N-myc proteins mediate binding to the retinoblastoma gene product. *Nature* **352**, 541-544.
28. Howard, E., Marcus, D., O'Brien, J., Albert, D., and Bernards, R. (1992). Five DNA tumor viruses undetectable in human retinoblastoma. *Investigative Ophthalmology and Visual Science* **33**, 1564-1567.
 29. van 't Veer, L.J., Lutz, P.M., Isselbacher, K.J., and Bernards, R. (1992). Structure and expression of MBP-2: a 275 kDa zinc finger protein that binds to an enhancer of Major Histocompatibility Complex class I genes. *Proc. Natl. Acad. Sci. USA.* **89**, 8971-8975.
 30. van 't Veer, L.J., Beijersbergen, R.L., and Bernards, R. (1993). N-myc suppresses Major Histocompatibility Complex class I gene expression through down-regulation of the p50 subunit of NF-κB. *EMBO J.* **12**, 195-200.
 31. Billaud, M., and Bernards, R. (1993). A dominant-negative mutant of Max that inhibits sequence-specific DNA binding myc proteins. *Proc. Natl. Acad. Sci. USA.* **90**, 2739-2743.
 32. Hateboer, G., Timmers, H.T.M., Rustgi, A.K., Billaud, M., Van 't Veer, L.J., and Bernards, R. (1993). TATA-binding protein and the retinoblastoma gene product bind to overlapping epitopes on c-myc and adenovirus E1A protein. *Proc. Natl. Acad. Sci. USA.* **90**, 8489-8493.
 33. Beijersbergen, R.L., Hijmans, E.M., Zhu, L., and Bernards, R. (1994). Interaction of c-Myc with the pRb-related protein p107 results in inhibition of c-Myc-mediated transactivation. *EMBO J.* **13**, 4080-4086.
 34. Beijersbergen, R.L., Kerkhoven, R.M., Zhu, L., Carlée, L., Voorhoeve, F.M., and Bernards, R. (1994). E2F-4, a new member of the E2F gene family, has oncogenic activity and associates with p107 in vivo. *Genes, Dev.* **8**, 2680- 2690.
 35. Zhu, L., Enders, G., Lees, J.A., Beijersbergen, R.L., Bernards, R., and Harlow, E. (1995). The pRB-related protein p107 contains two growth suppression domains: independent interactions with E2F and cyclin/cdk complexes. *EMBO J.* **14**, 1904-1913.
 36. Hijmans, E.M., Voorhoeve, P.M., Beijersbergen, R.L., van 't Veer, L.J. and Bernards, R. (1995). E2F-5, a new E2F family member that interacts with p130 *in vivo*. *Mol Cell. Biol.*, **15**, 3082-3089.
 37. Beijersbergen, R.L., Carlée, L., Kerkhoven, R.M., and Bernards, R. (1995). Regulation of the retinoblastoma protein-related p107 by G1 cyclin complexes. *Genes, Dev.* **9**, 1340-1353.
 38. Hateboer, G., Gennissen, A.M.C., Ramos, Y.F.M., Kerkhoven, R., Sonntag-Buck, V., Stunnenberg, H.G. and Bernards, R. (1995). BS69: A novel adenovirus E1A-associated protein that inhibits E1A transactivation. *EMBO J.* **14**, 3159-3169.
 39. Buck, V., Allen, K.E., Sørensen, T., Bybee, A., Hijmans, E.M., Voorhoeve, P.M., Bernards, R. and La Thangue, N.B. (1995). Molecular and functional characterization of E2F-5, a new member of the E2F family. *Oncogene* **11**, 31-38.
 40. Walworth, N.C., and Bernards, R. (1996). rad-Dependent response of the chk1-encoded protein kinase at the DNA damage checkpoint. *Science* **271**,353-356.

41. Smith-Sørensen, B., Hijmans, E.M. and Bernards, R. (1996). Functional analysis of Burkitt's lymphoma mutant c-Myc proteins. *J. Biol. Chem.* **271**, 5513-5518.
42. Hateboer, G., Hijmans, E. M., Nooij, J. B. D., Schlenker, S., Jentsch, S., and Bernards, R. (1996). mUBC9, a novel adenovirus E1A-interacting protein that complements a yeast cell cycle defect. *J. Biol. Chem.* **271**, 25906-25911.
43. Hateboer, G., Kerkhoven, R.M., Shvarts, A., Bernards, R., and Beijersbergen, R.L. (1996). Degradation of E2F by the ubiquitin-proteasome pathway: regulation by retinoblastoma family proteins and adenovirus transforming proteins. *Genes, Dev.* **10**, 2960-2970.
44. Zwijsen, R.M.L., Wientjes, E., Klompmaker, R., van der Sman, J., Bernards, R., and Michalides, R.J.A.M. (1997). CDK-independent activation of estrogen receptor by cyclin D1. *Cell* **88**, 405-415.
45. Peeper, D. S. Upton, T. M., Ladha, M. H., Neuman, E., Zalvide, J., Bernards, R., DeCaprio, J. A., and Ewen, M. E. (1997). Ras signalling linked to the cell-cycle machinery by the retinoblastoma protein. *Nature* **386**, 177-181.
46. Tong, H., Hateboer, G., Perrakis, A., Bernards, R., and Sixma, T.K. (1997). Crystal structure of mammalian Ubc9 provides insight into the variability of the ubiquitin-conjugating system. *J. Biol. Chem.* **272**, 21381-21387.
47. Walhout, A.J.M., Gubbels, J.M., Bernards, R., van der Vliet, P.C., and Timmers, H.Th.M. (1997). c-Myc/Max heterodimers bind cooperatively to the E-box sequences located in the first intron of the rat ornithine decarboxylase (ODC) gene. *Nucleic Acids Res.* **25**, 1493-1501.
48. Berns, K., Hijmans, E.M., and Bernards, R. (1997). Repression of c-Myc-responsive genes in cycling cells causes G1 arrest through reduction of cyclin E/CDK2 kinase activity. *Oncogene* **16**, 1347-1356.
49. Allen, K.E., de la Luna, S., Kerkhoven, R.M., Bernards, R., and LaThangue, N.B. (1997). Distinct mechanisms of nuclear accumulation regulate the functional consequence of E2F transcription factor. *J. Cell. Sci.* **110**, 2819-2831.
50. Zwijsen, R.M.L., Buckle, R.S., Hijmans, E.M., Loomans, C.J.M. and Bernards, R. (1998). Activation of estrogen receptor by cyclin D1 through direct recruitment of steroid receptor coactivators. *Genes, Dev.* **12**, 3488-3498.
51. Voorhoeve, P.M., Hijmans, E.M., and Bernards, R. (1999). Functional interaction between a novel Protein Phosphatase 2A regulatory subunit, PR59, and the retinoblastoma-related p107 protein. *Oncogene* **18**, 515-524.
52. Voorhoeve, P.M., Watson, R.J., Farlie, P.G., Bennett, J.D., Bernards, R. and Lam, E. W-F. (1999). Rapid dephosphorylation of p107 following UV irradiation. *Oncogene* **18**, 679-688.
53. Di Fiore, B., Guaraguaglini, G., Palena, A., Kerkhoven, R.M., Bernards, R., and Lavia, P. (1999). Two E2F-binding sites independently control growth-regulated and cell cycle-regulated transcription of the *Htf9-a/RanBP1* gene. *J. Biol. Chem.* **274**, 10339-10348.
54. Masselink, H., and Bernards, R. (2000). The adenovirus E1A binding protein BS69 is

- a corepressor of transcription through recruitment of N-CoR. *Oncogene* **19**, 1538-1546.
55. Agami, R., and Bernards, R. (2000). Distinct initiation and maintenance mechanisms cooperate to induce G1 cell cycle arrest in response to DNA damage. *Cell* **102**, 55-66.
56. Berns, K., Hijmans, E. M., Koh, E., Daley, G. Q., and Bernards, R. (2000). A genetic screen to identify genes that rescue the slow growth phenotype of *c-myc* null fibroblasts, *Oncogene* **19**, 3330-3334.
57. Berns, K., Martins, C., Dannenberg, J.H., Berns, A.J.M., te Riele H., and Bernards, R. (2000). p27^{kip1}-independent cell cycle regulation by MYC. *Oncogene* **19**, 4822-4827.
58. Peepoer, D.S., Dannenberg, J-H., Douma, S., te Riele, H., and Bernards, R. (2001). Escape from replicative arrest is not sufficient for Ras-dependent oncogenic transformation. *Nature Cell Biology* **3**, 198-203.
59. Masselink, H., Vastenhoud, N., and Bernards, R. (2001). B-*myb* rescues *ras*-induced premature senescence, which requires its transactivation domain. *Cancer Letters*, **171**, 87-101.
60. Peepoer, D.S., Shvarts, A., Brummelkamp, T., Douma, S., Koh, E., Daley, G.Q., and Bernards, R. (2002). A functional screen identifies *hDRIL1* as an oncogene that rescues *RAS*-induced senescence. *Nature Cell Biology* **4**, 148-153.
61. van 't Veer, L.J., Dai, H., van de Vijver, M.J., He, Y.D., Hart, A. A. M., Mao, M., Peterse, H.L., van der Kooy, K., Marton, M. J., Witteveen, A.T., Schreiber, G. J., Kerkhoven, R. M., Roberts, C., Linsley, P. S., Bernards R., and Friend, S. H. (2002). Gene expression profiling predicts clinical outcome of breast cancer. *Nature* **415**, 530-536.
62. Brummelkamp, T. R., Kortlever, R. M., Lingbeek, M., Trettel, F., MacDonald, M. E., van Lohuizen M., and Bernards R. (2002). *TBX-3*, the gene that is mutated in Ulnar-Mammary syndrome, is a negative regulator of p19^{ARF} and inhibits senescence. *J. Biol. Chem.* **277**, 6567-6572.
63. Shvarts, A., Brummelkamp, T., Koh, E., Daley, G.Q., and Bernards, R (2002). A senescence rescue screen identifies *BCL6* as an inhibitor of antiproliferative p19^{ARF}-p53 signalling. *Genes, Dev.* **16**, 681-686.
64. Brummelkamp, T.R., Bernards, R., and Agami, R. (2002). A system for stable expression of short interfering RNAs in mammalian cells. *Science* **296**, 550-553.
65. Rowland, D.B., Denissov, S.G., Douma, S., Stunnenberg, H.G., Bernards, R., and Peepoer, D.S. (2002). E2F transcriptional repressor complexes are critical downstream targets of p19^{ARF}/p53-induced proliferative arrest. *Cancer Cell* **2**, 55-65.
66. Brummelkamp, T.R., Bernards R and Agami, R. (2002). Stable suppression of tumorigenicity by virus-mediated RNA interference. *Cancer Cell* **2**, 243-247.
67. Van de Vijver, M.J., He, Y.D., van 't Veer, L.J., Dai, H., A M Hart A.A.M., Voskuil, D., Schreiber, G.J., Peterse, J.L., Roberts, C., Marton, M.J., Parrish, M., Atsma, D., Witteveen, A., Glas, A., Delahaye, L., van der Velde, T., Bartelink H., Rodenhuis S.,

- Rutgers,E. Th., Friend, S.H. and Bernards, R. (2002). A gene expression signature as a predictor of survival in breast cancer. *New England J. Med.* **347**, 1999-2009.
- 68 Dirac, A.M.G., and Bernards, R. (2003). Reversal of senescence in mouse fibroblasts through lentiviral suppression of p53. *J. Biol. Chem.* **278**, 11731-11734.
- 69 Brummelkamp, T.R., Nijman, S.M.B., Dirac, A.M.G., and Bernards, R. (2003). Loss of the cylindromatosis tumour suppressor inhibits apoptosis by activating NF- κ B, *Nature*, **424**, 797-801.
- 70 Scheijen, B., Bronk, M., van der Meer, T, and Bernards, R. (2003). Constitutive E2F1 overexpression delays endochondral bone formation by inhibiting chondrocyte differentiation. *Mol. Cell. Biol.* **23**, 3656-3668.
- 71 Das, A.T., Brummelkamp, T.R., Westerhout, E.M., Vink, M., Madiredjo, M., Bernards, R., and Berkhouit, B. (2004). HIV-1 escapes from RNA interference-mediated inhibition. *J. Virol.* **78**, 2601-2605.
- 72 Berns, K., Hijmans, E.M., Mullenders J., Brummelkamp, T.R., Velds, A., Heimerikx, Kerkhoven, R. M., Madiredjo, M., Nijkamp, W., Weigelt, B., Agami, R., Ge, W., Cavet, G., Linsley, P.S., Beijersbergen' R.L. and Bernards, R. (2004). A large-scale RNAi screen in human cells identifies new components of the p53 pathway. *Nature*, **428**, 431-437.
- 73 Scheijen, B., Bronk, M., van der Meer, T., De Jong D. and Bernards, R. (2004). Enforced expression of E2F2 induces thymic epithelial tumors in mice. *J. Biol. Chem.*, **279**, 10476-10483
- 74 Edel, M.J., Shvarts, A., Medema, J.P. and Bernards, R. (2004). An *in vivo* functional genetic screen reveals a role for the TRK-T3 oncogene in tumor progression. *Oncogene*, **23**, 4959-65.
- 75 Logan, N., Delavaine, L., Graham, A., Reilly, C., Wilson, J., Brummelkamp, T.R., Hijmans, E.M., Bernards, R., and La Thangue, N.B. (2004). E2F-7: a distinctive E2F family member with unusual organization of DNA binding domains. *Oncogene*, **23**, 5138-5150.
- 76 Glas, A.M., Kersten, M.J., Delahaye, L.J.M.J., Witteveen, A.T., Kibbelaar, R.E., Velds, A., Wessels, L.F.A., Joosten, P., Kerkhoven, R.M., Bernards, R., van Krieken, J.H.J.M., Kluin, P.M., van 't Veer, L.J., de Jong, D. (2005). Gene expression profiling in Follicular Lymphoma to assess clinical aggressiveness and to guide the choice of treatment. *Blood*, **105**, 301-307.
- 77 Nijman, S.M.B., Huang, T.T., Dirac, A.M.G., Brummelkamp, T.R., Kerkhoven, R.M., D'Andrea, A.D and Bernards, R. (2005). A genetic screen identifies the de-ubiquitininating enzyme USP1 as a regulator of Fanconi Anemia D2 mono-ubiquitination. *Mol. Cell.* **17**, 331-339.
- 78 Creyghton, M.P., Roël, G., Eichhorn, P J.A., Hijmans, E.M., Maurer, I., Destrée, O and Bernards. R. (2005). PR72, a novel regulator of Wnt signaling required for naked cuticle function. *Genes, Dev.*, **19**, 376-386.
- 79 Dai, H., van 't Veer, L.J., Lamb, J., He, Y., Mao, M., Fine, B.M., Bernards, R., van de Vijver, M.J., Deutsch, P., Sachs, A., Stoughton, R., and Friend, S.H. (2005). A cell proliferation signature is a marker of extremely poor outcome in a subpopulation of breast cancer patients. *Cancer Res.* **65**, 4059-4066.

- 80 Kolfschoten, I.G.M., van Leeuwen, B., Berns, K., Mullenders, J., Beijersbergen, R.L., Bernards, R., Voorhoeve, P.M., and Agami, R. (2005). A genetic screen identifies PITX1 as a suppressor of RAS activity and tumorigenicity. *Cell* **121**, 849-858.
- 81 Epping, M.T., Wang, L., Edel, M.J., Hernandez, M., and Bernards, R. (2005). The human tumor antigen PRAME is a dominant repressor of retinoic acid receptor signaling. *Cell*, **122**, 835-847.
- 82 Rowland, B.D., Bernards, R., and Peepoer, D.S. (2005). The KLF4 tumour suppressor is a transcriptional repressor of p53 that acts as a context-dependent oncogene. *Nature Cell Biology*, **7**, 1074-1082.
- 83 Nicke, B., Bastien, J., Khanna, S.J., Warne, P.H., Cowling, V., Cook, S.J., Peters, G., Delpuech, O., Schulze, A., Berns, K., Mullenders, J., Beijersbergen, R.L., Bernards, R., Ganesan, T.S., Downward J., and Hancock, D.C. (2005). Involvement of MINK, a Ste20 family kinase, in Ras oncogene-induced growth arrest in human ovarian surface epithelial cells, *Mol. Cell*, **20**, 673-685.
- 84 Milton, A., Luoto, K., Ingram, L., Logan, N., Graham, A.L., Brummelkamp, T.R., Hijnmans, E.M., Bernards, R and La Thangue, N.B. (2006). A functionally distinct member of the DP family of E2F subunits. *Oncogene* **25**, 3212-3218.
- 85 Brummelkamp, T.R., Fabius, A., Mullenders, J., Madiredjo, M., Velds, A., Kerkhoven, R.M., Bernards, R., and Beijersbergen, R.L. (2006). An shRNA barcode screen provides insight into cancer cell vulnerability to MDM2 inhibitors. *Nature Chem. Biol.* **2**, 202-206.
- 86 Oosterkamp, H.M., Neering, H., Nijman, S.M.B., Dirac, A.M.G., Mooi, W.J., Bernards, R and Brummelkamp, T.R. (2006). Topical application of salicylic acid for the treatment of familial cylindromas. *Br. J. Dermatol.* **155**, 182-185.
- 87 Huang, T.T., Nijman, S. M.B., Mirchandani, K.D., Galardy, P. J., Cohn, M. A., Haas, W., Gygi, S. P., Ploegh, H. L., Bernards, R. and D'Andrea, A. D. (2006). Regulation of monoubiquitinated PCNA by DUB autocleavage. *Nature Cell Biology*, **8**, 339-347.
- 88 Creyghton, M.P., Roël, G., Eichhorn, P J.A., Destree, O and Bernards. R. (2006). A new modulator of the Wnt signaling cascade that counters repression of the antagonist Naked Cuticle. *Proc. Natl. Acad. Sci. USA*, **103**, 5397-5402.
- 89 Nijman, S.M.B., Hijnmans, E.M., El Messaoudi, S., van Dongen, M., Sardet, C. and Bernards, R. (2006). A functional screen identifies TFE3 as a gene that confers resistance to the anti-proliferative effects of the retinoblastoma protein and TGF-beta. *J. Biol. Chem.* **281**, 21582-21587.
- 90 Kortlever, R.M., Higgins, P.J., Bernards, R. (2006). Plasminogen activator inhibitor-1 is a critical downstream target of p53 in the induction of replicative senescence. *Nature Cell Biol.* **8**, 878-884.
- 91 Glas, A.M., Floore, A., Delahaye, L.J.M.J., Witteveen, A., Pover, R.C., Bakx, N., Lahti-Domenici, J.S., Bruinsma, T.J., Warmoes, M.O., Bernards, R., Wessels, L.F., and Van 't Veer. L.J. (2006). Converting a breast cancer microarray signature into a high-throughput diagnostic test. *BMC Genomics* **7**, 278-285.

- 92 Popov, N., Wanzel, M., Madiredjo, M., Zhang, D., Beijersbergen, R.L., Bernards R., Moll, R., Elledge, S. and Eilers, M (2007). The ubiquitin-specific protease USP28 is required for MYC stability in human tumor cells. *Nature Cell Biol.* **9**, 765-774.
- 93 Berns, K., Horlings, H., Hennessy, B.T., Madiredjo, M., Hijmans, E.M., Beelen, K., Linn, S.C., Gonzalez-Angulo, A.M., Stemke-Hale, K., Hauptmann, M., Beijersbergen, R.L., Mills, G.B., van de Vijver, M.J., and Bernards, R. (2007). A functional genetic approach identifies the PI3K pathway as a major determinant of Trastuzumab resistance in breast cancer. *Cancer Cell* **12**, 395-402.
- 94 Epping, M.T., Wang, L., Plumb, J.A., Lieb, M., Gronemeyer, H., Brown, R. and Bernards, R. (2007). Repression of retinoic acid signaling confers resistance to histone deacetylase inhibitors. *Proc. Natl. Acad. Sci. USA* **104**, 17777-17782.
- 95 Eichhorn, P.J.A., Creyghton, M.P., Wilhelmsen, K., van Dam, H., and Bernards, R. (2007). A RNA interference screen identifies the Protein Phosphatase 2A subunit PR55 γ as a stress-sensitive inhibitor of c-SRC. *PloS Genet.* **3**, 2381- 2394.
- 96 Wittner, B.S., Sgroi, D.C., Paula D. Ryan, P.D., Bruinsma, T.J., Glas, A.M., Male, A., Dahiya, S., Habin, K., Bernards, R., Haber, D.A., van 't Veer, L.J. and Ramaswamy, S. (2008). Analysis of the MammaPrint breast cancer assay in a predominantly postmenopausal cohort. *Clinical Cancer Res.* **14**, 2988-2993.
- 97 Stemke-Hale, K., Gonzalez-Angulo, A.M., Lluch, A., Davies, M., Carey, M., Hu, Z., Guan, Y., Sahin, Symmans, W.F., Pusztai, L., Nolden, L., A., Horlings, H., Berns, K., Hung, M.C., van de Vijver, M.J., Valero, V., Gray, J.W., Bernards, R., Mills, G.B., and Hennessy, B. (2008). An integrative genomic and proteomic analysis of PIK3CA, PTEN and AKT mutations in breast cancer. *Cancer Res.* **68**, 6084-6091.
- 98 Epping, M.T., Hart, A.A.M., Glas, A.M., Krijgsman, O. and Bernards, R. (2008). PRAME expression and clinical outcome of breast cancer. *Br. J. Cancer* **99**, 398-403.
- 99 Kortlever, R.M., Nijwening, J.H., and Bernards, R. (2008). TGF β requires its target plasminogen activator inhibitor-1 for cytostatic activity. *J. Biol. Chem.* **283**, 24308-24313.
- 100 Kortlever, R.M., Brummelkamp, T.R., van Meeteren, L.A., Moolenaar, W.M., and Bernards, R. (2008). Suppression of the p53-dependent replicative senescence response by lysophosphatidic acid signaling. *Mol. Cancer Res.* **6**, 1452-1460.
- 101 Herold, S., Hock, A., Herkert, B., Berns, K., Mullenders, J., Beijersbergen, R.L., Bernards, R., and Eilers, M. (2008). Miz1 and HectH9 regulate the stability of the checkpoint protein, TopBP1. *EMBO J.* **27**, 2851-2861.
- 102 Eichhorn, P.J.A., Gili , M., Scaltriti, M., Serra, V., Guzman, M., Nijkamp, W., Beijersbergen, R.L., Valero, V., Seoane, J., Bernards, R., and Baselga, J. (2008). Phosphatidylinositol 3-kinase hyperactivation results in lapatinib resistance that is reversed by the mTOR/phosphatidylinositol 3-kinase inhibitor NVP-BEZ235. *Cancer Res.* **68**, 9221-9230
- 103 Fotheringham, S., Epping, M.T., Stimson, L., Kahn, O., Wood, V., Pezzella, F., Bernards, R., and La Thangue, N.B. (2009). Genome-wide loss-of-function screen reveals an important role for the proteasome in HDAC inhibitor-induced apoptosis. *Cancer Cell* **15**, 57-66.

- 104 Huang, S., Laoukili, J., Epping, M.T., Koster, J., Holzel, M., Westerman, B.A., Nijkamp, W., Hata, A., Asgharzadeh S., Seeger, R.C., Versteeg, R., Beijersbergen' R.L., and Bernards, R. (2009). ZNF423 Is Critically Required for Retinoic Acid-Induced Differentiation and Is a Marker of Neuroblastoma Outcome. *Cancer Cell.* **15**, 328-340.
- 105 Mullenders, J Fabius, A. W. M., Madiredjo, M., Bernards, R and Beijersbergen, R.L. (2008). A large-scale shRNA barcode screen identifies the circadian clock component ARNTL as putative regulator of the p53 tumor suppressor pathway. *PLoS ONE.* 2009;4(3): e4798.
- 106 Sum, E.Y.M., Drosten, M., Dhawahir, A., Huang, S., Beijersbergen, R.L., Bernards, R, and Barbacid, M. (2009). p53 prevents cell proliferation in the absence of Ras-mediated mitogenic signaling. Submitted for publication.
- 107 Mullenders, J., von der Saal, W., van Dongen, M.M.W., Reiff, U., van Willigen, R., Beijersbergen, R.L., Tiefenthaler, G., Klein, C and Bernards, R. (2009). Candidate biomarkers of response to an experimental cancer drug identified through a large-scale RNA interference genetic screen. *Mol. Cancer Res.* In press.
- 108 Vredeveld, L.C.W., Rowland, B.D., Douma, S., Bernards, R., and Peeper, D.S. (2009). Functional identification of LRF as an oncogene that bypasses RASV12-induced senescence via upregulation of cyclin E. *Carcinogenesis*, Nov 25 [Epub ahead of print].
- 109 Brennan, D.L., O'Connor, D.P., Laursen, H., McGee, S.F., McCarthy, S., Rexhepaj, E., Culhane, A.C., Hewitt, S.M., Martin, F.M., Duffy, M.J., Landberg, G., Ryden, L., Bernards, R., Millikan, R.C., Jirström K., and Gallagher, W.M. (2009). CART is an Independent Prognostic Factor in Node-Negative Breast Cancer and Predicts Tamoxifen Response. Submitted for publication.
- 110 Sum, E.Y.M., Drosten, M., Dhawahir, A., Huang, S., Beijersbergen, R.L., Bernards, R, and Barbacid, M. (2009). p53 prevents cell proliferation in the absence of Ras-mediated mitogenic signaling. Submitted for publication.
- 111 Mullenders, J., Fabius, A.W.M., van Dongen, M.M.W., Kuiken, H.J., Beijersbergen, R.L., and Bernards, R. (2009). IRAK2 is a novel modulator of the TGF β signaling cascade. Submitted for publication.
- 112 Hözel, M., Huang, S., Koster, J., Øra, I., Lakeman, A., Caron, H., Nijkamp, W., Xie, J., Callens, T., Asgharzadeh, S., Seeger, R.C., Messiaen, L., Versteeg, R., and Bernards, R. (2009). NF1 is a tumor suppressor in neuroblastoma that determines retinoic acid response and disease outcome. Submitted for publication.
- 113 Epping, M.T., Meijer, L.A.T., Krijgsman, O., Bos, J.L., Pandolfi, P.P., and Bernards, R. (2009). *TSPYL5* is a novel breast cancer oncogene that mediates p53 destruction by binding to USP7. Submitted for publication.

Reviews, Chapters and Editorials

- R1. Flavell, R.A., Grosveld, G.C., Grosveld, F.G., Bernards, R., Kooter, J., and De Boer, E. (1979). The structure and expression of normal and abnormal globin genes. In: From gene to protein: Information transfer in normal and abnormal cells. (Russel, T.R., Brew, K., Faber, M., and Schultz, J., Eds.). Miami Winter Symp. Vol. 16, Academic Press, N.Y., pp 149-164.
- R2. Flavell, R.A., Bernards, R., Grosveld, G.C., Hoeijmakers-van Dommelen, H.A.M., Kooter, J.M., De Boer, E., and Little, P.F.R. (1979). The structure and expression of globin genes in rabbit and man. In: Eukaryotic Gene Regulation. (Axel, R., Maniatis, T., and Fox, C.F., Eds.). ICN-UCLA Symposia on Molecular and Cellular Biology, Vol. 14, Academic Press, N.Y., pp 335-354.
- R3. Van der Eb, A.J., Bernards, R., van den Elsen, P.J., Bos, J.L., and Schrier, P.I. (1983). Studies on the role of adenovirus E1 genes in transformation and oncogenesis. In: Human Carcinogenesis (Harris, C.C., and Autrup, H.N., Eds.). Academic Press, N.Y., pp 631- 657.
- R4. Van der Eb, A.J., Bernards, R., Schrier, P.I., Bos, J.L., Vaessen, R.T.M.J., Jochemsen, A.G., and Melief, C.J.M. (1983). Altered expression of cellular genes in adenovirus-transformed cells. In: Cancer Cells Vol. 2: Oncogenes and Viral Genes. Cold Spring Harbor, N.Y., pp 501-510.
- R5. Van der Eb, A.J., and Bernards, R. (1983). In: Current topics in microbiology and immunology (Doerfler W, Ed). Vol. 110: The molecular biology of adenoviruses 2. Springer Verlag, Berlin, pp 23-51.
- R6. Bernards, R., and Van der Eb, A.J. (1984). Adenoviruses: Transformation and Oncogenicity. Biochem. Biophys. Acta **783**, 187-204.
- R7. Vaessen, R.T.M.J., Bernards, R., Oostra, B.A., Houweling, A., Jochemsen, A.G., Bos, J.L., and Van der Eb, A.J. (1984). Expression of MHC genes in adenovirus-transformed cells. In: Genes and Cancer (Bishop, J.M., Rowley, J.D., and Greeves, M., Eds.). Alan R. Liss Inc. N.Y., pp 303-314.
- R8. Vaessen, R.T.M.J., Jochemsen, A.G., Bos, J.L., Bernards, R., Israel, A., Kourilsky, P., and Van der Eb, A.J. (1986). The role of the adenovirus E1a region in transformation and oncogenesis. In: Cancer Cell Vol. 4: DNA tumor viruses. Cold Spring Harbor, N.Y., pp 303-314.
- R9. Bernards, R. (1987). Suppression of MHC gene expression in cancer cells. Trends in Genetics **3**, 298-301.
- R10. Bernards, R., O'Brien, J.M., Marcus, D.M., Albert, D.M., Jacks, T., and Weinberg, R.A. (1989). Towards an animal model for retinoblastoma. In: Hormones and Cell Regulation: Proceedings of the 14th INSERM European Symposium on Hormones and Cell Regulation (Nunez, J., and Dumont, J.E. Eds.). J. Libbey Eurotext Ltd, London, pp 85-90.
- R11. O'Brien, J.M., Marcus, D.M., Niffenegger, A.S., Bernards, R., Carpenter, J.L., Windle, J.J., Mellon, P., and Albert, D.M. (1989). Trilateral retinoblastoma in transgenic mice. Tr. Am. Ophth. Soc. **87**, 301-326.
- R12. Bernards, R, and Lenardo, M. (1990). Molecular events during tumor progression in neuroblastoma. In: Contribution to Oncology. Vol. 39: Oncogenes in cancer

- diagnostics (C.R. Bartram, K. Munk, M. Schwab, Eds). Karger AG, Basel, pp 86- 93.
- R13. Albert, D.M., O'Brien, J.M., Marcus, D.M., and Bernards, R. (1990). Retinoblastoma: genetic considerations and report of a new animal model. In: Seminaires Ophthalmologiques d'IPSEN (Y. Christen and M.T. Droy-Lefaix, Eds). Springer, Berlin, pp. 185-190.
- R14 Rustgi, A.K., Dyson, N., Hill, D., and Bernards, R. (1991). The *c-myc* oncoprotein forms a specific complex with the product of the retinoblastoma gene. In: Cold Spring Harbor Symposia on Quantitative Biology Vol. **56**: The Cell Cycle pp 163-167.
- R15. Brodeur, G.M., and Bernards, R. (1993). Biology of tumors of the peripheral nervous system. In: Molecular Genetics of Nervous System Tumors (A.J. Levine and H.H. Schmidk, Eds). J. Wiley & Sons Inc., New York pp 229-239.
- R16 Bernards, R. (1995). Flipping the Myc switch. Current Biology **5**, 859-861.
- R17. Beijersbergen, R. L., and Bernards, R. (1996). Cell cycle regulation by the retinoblastoma family of growth inhibitory proteins. Biochem. Biophys. Acta, Reviews on Cancer **1287**, 103-120.
- R18 Bernards, R. (1996) Cycling in Switzerland. Trends in Genet. **12**, 158-159.
- R19 Peepoer, D.S. and Bernards, R. (1997). Communication between the extracellular environment, cytoplasmic signalling cascades and the nuclear cell-cycle machinery. FEBS Lett. **410**, 11-16.
- R20. Bernards, R. (1997). E2F: A nodal point in cell cycle regulation. Biochem. Biophys. Acta, Reviews on Cancer **1333**, M33-M40.
- R21. Bernards, R (1999). CDK-independent activities of D type cyclins. Biochem. Biophys. Acta, Reviews on Cancer 1424, M17-M22.
- R22 Bernards, R. (2001). Cyclin D. In: Cancer Research, An Encyclopedic Reference (M. Schwab, Ed). Springer, Berlin, p 231-234.
- R23 Oosterkamp, H.M. and Bernards, R. (2002). The androgen receptor and estrogen receptor. In: Targets for Cancer Chemotherapy: Transcription factors and other nuclear proteins. (N. B. Ia Thangue and L. R. Bandara, Eds). Humana Press, Totowa, NJ, USA, p315-340.
- R24 Agami, R. and Bernards, R (2002). Convergence of mitogenic- and DNA damage signaling in the G1 phase of the cell cycle. Cancer Letters **117**, 111-118.
- R25 Bernards, R. and Weinberg, R.A. (2002). Metastasis genes: A progression puzzle. Nature, **418**, 823.
- R26 Bernards, R. and Weinberg, R.A. (2002). Metastasis: objections to the same-gene model. Nature, **419**, 560.
- R27 Van 't Veer, L. J., Dai, H., Van De Vijver, M. J., He, Y. D., Hart, A. A., Bernards, R. and Friend, S. H. (2003). Expression profiling predicts outcome in breast cancer. Breast Cancer Res, **5**, 57-58.
- R28 Helmbold, P., Haerting, J., Kolbl, ., Kopans, D. B., Kunkler, I. H., Ransohoff, D. F., van de Vijver, M. J., He, Y. D., van 't Veer, L. J. and Bernards, R. (2003). Gene

- Expression Signatures in Breast Cancer. *N. Engl. J. Med.*, **348**, 1715-1717.
- R29 Bernards, R (2003). Cues for migration. *Nature*, **425**, 247-248.
- R30 Brummelkamp, T.R. and Bernards, R (2003). New tools for functional mammalian cancer genetics. *Nature Rev. Cancer*, **3**, 781-789.
- R31 Bernards, R (2004). Wip-ing our cancer. *Nature Genet.*, **36**, 319-320.
- R32 Tytgat, G.N., Bartelink, H., Bernards, R., Giaccone, G., van Lanschot, J.J., Offerhaus, G.J., and Peters, G.J. (2004). Cancer of the esophagus and gastric cardia: recent advances. *Dis Esophagus*, **17**, 10-26.
- R33 Brummelkamp, T.R., Berns, K., Hijmans, E.M., Mullenders, J., Fabius, A., Heimerikx, M., Velds, A., Kerkhoven, R.M., Madiredjo, M., Bernards, R. and Beijersbergen, R.L. (2005). Functional identification of cancer-relevant genes through large-scale RNA interference screens in mammalian cells. In: *Cold Spring Harbor Symposia on Quantitative Biology Vol. 69: Epigenetics*. p 439-445.
- R34 Bernards, R. (2005). A functional approach to questions about life, death and phosphorylation. *Cancer Cell*, **7**, 503-504.
- R35 Dirac, A.M.G., Nijman, S.M.B., Brummelkamp, T.R. and Bernards, R. (2005). Functional annotation of deubiquitinating enzymes using RNA interference. In: *Methods in Enzymology. Ubiquitination and protein degradation, part A* (R.J. Deshaies, ed). Elsevier Press. Vol. **398**. p 554-467.
- R36 Nijman, S.M.B., Luna-Vargas, M.P.A., Velds, A., Brummelkamp, T.R., Dirac, A.M.G., Sixma, T.K., and Bernards, R. (2005). A Genomic and Functional Inventory of Deubiquitinating Enzymes. *Cell*, **123**. 773-786.
- R37 Bernards, R., Brummelkamp, T.R., and Beijersbergen, R.L. (2006). shRNA libraries and their use in cancer genetics. *Nature Methods* **3**, 701-706.
- R38 Echeverri, C.J., Beachy, P.A., Baum, B., Boutros, M., Buchholz, F., Chandra, S.K., Downward, J., Ellenberg, J., Fraser, A.G., Hacohen, N., Hahn, W.C., Jackson, A.L., Kiger, A., Linsley, P.S., Lum, L., Ma, Y., Mathey-Prévôt, B., Root, D.E., Sabatini, D.M., Taipale, J., Perrimon, N., and Bernards, R. (2006). Minimizing the risk of reporting false positives in large-scale RNAi screens. *Nature Methods* **3**, 777-779.
- R39 Epping, M.T., and Bernards, R. (2006). A causal role for the human tumor antigen preferentially expressed antigen of melanoma in cancer. *Cancer Res.* **66**, 10639-10642.
- R40 Rowland, B.D., and Bernards, R. (2006). Re-evaluating cell cycle regulation by E2Fs. *Cell* **127**, 871-874.
- R41 Bernards, R. (2006). Exploring the uses of RNAi - gene knockdown and the Nobel Prize. *New Eng J. Med.* **355**, 2391-2393.
- R42 Kortlever, R.M., and Bernards, R. (2006). Senescence, wound healing and cancer: the PAI-1 connection. *Cell cycle*, **5**, 2697-2703.
- R43 Bernards, R. (2006). Nobelprijs voor fysiologie of geneeskunde voor de ontdekking van RNA-interferentie. *Ned Tijdschr. Geneeskde*. **150**, 2849-2853.

- R44 Van 't Veer, L.J., and Bernards, R (2008). Enabling personalized cancer medicine through analysis of gene expression patterns. *Nature*, **452**, 564-570.
- R45 Bernards, R. (2008). Reaction to "American Society of Clinical Oncology 2007 update of recommendations for the use of tumor markers in breast cancer". *Journal of Clinical Oncology* **26**, 2057–2058.
- R46 Rutgers, E.J.T., Pusztai, L, and Bernards, R. (2008). Are short-term or long-term recurrence rates more important in breast cancer screening? *Ann Intern Med*. **149**, 357.
- R47 Bernards, R. (2008). Entangled pathways. *Nature*, **355**, 479-480.
- R48 Rutgers, E.J.Th., Linn, S.C., Wesseling, J., van der Hoeven, J.J.M., Klinkenbijl, J.H.G., van 't Veer L.J. and Bernards, R. (2008). Nuttige aanvulling. *Medisch Contact*, **63**, 1822-1826.
- R49 Epping, M.T., and Bernards, R. (2009) Molecular basis of the anti-cancer effects of histone deacetylase inhibitors. *Int. J Biochem. Cell. Biol.* **41**, 16-20.
- R50 Bernards, R. (2008). RNAi delivers insight into liver cancer. *Cell*, **135**, 793-795.
- R51 Eichhorn, P.J.A., Creyghton, M.P., and Bernards, R. (2009). Protein phosphatase 2A regulatory subunits and cancer. *Biochem. Biophys. Act.* **1795**, 1-15.
- R52 Mullenders, J and Bernards, R. (2009). Loss of function genetic screens as a tool to improve the diagnosis and treatment of cancer. *Oncogene*, Sep 21. [Epub ahead of print].
- R53 Bernards, R. (2009). It's diagnostics, stupid. Submitted for publication.