

Publication:

1. F. Tasnim, J. Xing, X. Huang, S. Mo, X. Wei, M.-H. Tan and Hanry Yu, "Generation of Mature Kupffer Cells from Human Induced Pluripotent Stem Cells", *Biomaterials*, 192 (2019), 377-391
2. G. Zhong, C. Yang, S. Liu, Y. Zheng, J. Y. Teo, W. Lou, C. Bao, W. Cheng, J. P. K. Tan, S. Gao, N. Park, S. Venkataraman, Y. Huang, M.-H. Tan, X. Wang, J. L. Hedrick, W. Fan and Y. Y. Yang, "Polymers with Distinctive Anticancer Mechanism that Kills MDR Cancer Cells and Inhibits Tumor Metastasis", *Biomaterials*, 2019; DOI: 10.1016/j.biomaterials.2019.01.036
3. H. Li, E. T. Courtois, D. Sengupta, Y. Tan, K. H. Chen, J. J. L. Goh, S. L. Kong, C. Chua, L. K. Hon, W. S. Tan, M. Wong, I. Cima, M.-H. Tan, L. J. K. Wee, A. M. Hillmer, I. B. Tan, P. Robson and S. Prabhakar, " Reference component analysis of single-cell transcriptomes elucidates cellular heterogeneity in human colorectal tumors", *Nature Genetics*, 50 (2018), 1754
4. J. Shi, J. Mong, T.M. Chin, Y.H. Lim, W.L. Tan, C.K. Toh, H.S. Tan, S-W. Wong, A. Tee, D. Chan, K. Wong, S. Yeap, L. Ngo, Y-O. Tan, M-H. Tan, "EGFR Mutation Detection In Plasma Cell-Free DNA Correlates With Clinical Outcomes In Non-Small Cell Lung Cancer," *Annals of Oncology*, 28 (2017) 1338P
5. J. Mong, J. Shi, T.M. Chin, S-W. Wong, A. Tee, D. Chan, K. Wong, S. Yeap, L. Ngo, Y-O. Tan, M. Hu, J. Ying, M-H. Tan; "Single-Cell Combined Mutation And Gene Expression Studies Of Circulating Tumor-Associated Cells In Non-Small Cell Lung Cancer," *Annals of Oncology*, 28 (2017) 126P
6. X. Wei, Y. Choudhury, W. K. Lim, J. Anema, R. J. Kahnoski, B. Lane, J. Ludlow, M. Takahashi, H. Kanayama, A. Belldegrun, H. L. Kim, C. Rogers, D. Nicol, B. T. Teh and M.-H. Tan, "Recognizing the Continuous Nature of Expression Heterogeneity and Clinical Outcomes in Clear Cell Renal Cell Carcinoma," *Scientific Reports*, 7 (2017) 7342
7. S. L. Kong, X. Liu, N-A. Mohamed Suhaimi, K. Koh, M. Hu, D. Lee, I. Cima, W. M. Phy, E. Lee, J. A. Tai, Y. M. Foong, J. Vo, P. K. Koh, T. Zhang, J. Y. Ying, B. Lim, M. H. Tan and A. M. Hillmer, "Molecular Characterization of Circulating Colorectal Tumor Cells Defines Genetic Signatures for Individualized Cancer Care," *Oncotarget*, 8 (2017) 68026-68037
8. N.-A. Mohamed Suhaimi, W. M. Phy, H. Y. Yap, S. Heng, X. Wei, Y. Choudhury, W. J. Tan, L. A. Peng, R. Foo, S. Tan, Z. Tiang, C. F. Wong, P. K. Koh and M. H. Tan, "Metformin Inhibits Cellular Proliferation and Bioenergetics in Colorectal Cancer Patient-Derived Xenografts," *Molecular Cancer Therapeutics*, 16 (2017) 2035-2044
9. Y. Choudhury, Y. C Toh, J. Xing, Y. Qu, J. Poh, L. Huan, H. S. Tan, R. Kanesvaran, H. Yu and M-H. Tan, "Patient-Specific Hepatocyte-Like Cells Derived from Induced Pluripotent Stem Cells Model Pazopanib-Mediated Hepatotoxicity," *Scientific Reports*, 7 (2017) 41238
10. Y. Zu, M. H. Tan, E. C. Ren and J. Y. Ying, "Facile and Phase-Defined Determination of HLA Alleles with Morpholino-Functionalized Nanoparticle Probes," *Nanomedicine*, (2016) DOI: 10.1016/j.nano.2016.09.009
11. I. Cima, S. L. Kong, D. Sengupta, I. B. Tan, W. M. Phy, D. Lee, M. Hu, C. Iliescu, I. Alexander, W. L. Goh, M. Rahmani, N.-A. Mohamed Suhaimi, J. H. Vo, J. A. Tai, J. H. Tan, C. Chua, R. Ten, W. J. Lim, M. H. Chew, C. A. E. Hauser, R. M. van Dam, W.-Y. Lim, S. Prabhakar, B. Lim, P. K. Koh, P. Robson, J. Y. Ying, A. M. Hillmer, M.-. Tan, "Tumor-Derived Circulating Endothelial Cell Clusters in Colorectal Cancer," *Science Translational Medicine*, 8 [345] (2016) 345ra89
12. W. J. Tan, I. Cima, Y. Choudhury, X. Wei, J. C. T. Lim, A. A. Thike, M.-H. Tan and P. H. Tan, "A Five-Gene Reverse Transcription-PCR Assay for Pre-Operative Classification of Breast Fibroepithelial Lesions," *Breast Cancer Research*, 18 (2016) 31
13. J. Y. Chan, Y. Choudhury, M.-H. Tan, "Doubling Down on mTOR Inhibition: Harnessing ZEBRA for Insights," *European Urology*, (2015) DOI: 10.1016/j.eururo.2015.09.047

14. S. Krishnamurthy, V. W. L. Ng, S. Gao, M.-H. Tan, J. L. Hedrick and Y. Y. Yang, "Codelivery of Dual Drugs from Polymeric Micelles for Simultaneous Targeting of Both Cancer Cells and Cancer Stem Cells," *Nanomedicine*, (2015) DOI: 10.2217/nmm.15.109
15. K. Xu, F. Lee, S. Gao, M.-H. Tan, M. Kurisawa, "Hyaluronidase-Incorporated Hyaluronic Acid-Tyramine Hydrogels for the Sustained Release of Trastuzumab," *Journal of Controlled Release*, 216 (2015) 47-55
16. H.S. Tan, H. Li, Y.W. Hong, C.K. Toh, A. Wong, G. Lopes, M.H. Tay, A. Chan, X. Yao, T. Tang, Q.S. Ng, R. Kanesvaran, N.M. Chau, M.H. Tan, "Efficacy and Safety of an Attenuated-Dose Sunitinib Regimen in Metastatic Renal Cell Carcinoma: Results from a Prospective Registry in Singapore," *Clinical Genitourinary Cancer* (2014) DOI: 10.1016/j.clgc.2014.11.004
17. N.A. Mohd Suhaimi, Y.M. Foong, D.Y.S. Lee, W.M. Phy, I. Cima, E.X.W. Lee, W.L. Goh, W.Y. Lim, K.S. Chia, S.L. Kong, M. Gong, B. Lim, A.M. Hillmer, P.K. Koh, J.Y. Ying, M.H. Tan, "Non-Invasive Sensitive Detection of KRAS and BRAF Mutation in Circulating Tumor Cells of Colorectal Cancer Patients," *Molecular Oncology* (2015) DOI: 10.1016/j.molonc.2014.12.011
18. S. Krishnamurthy, V. W. L. Ng, S. Gao, M.-H. Tan, Y. Y. Yang, "Phenformin-loaded Polymeric Micelles for Targeting Both Cancer Cells and Cancer Stem Cells In Vitro and In Vivo," *Biomaterials*, (2014) DOI: 10.1016/j.biomaterials.2014.07.018
19. Y. Choudhury, X. Wei, Y. H. Chu, L. G. Ng, H. S. Tan, V. Koh, A. A. Thike, E. Poon, Q. S. Ng, C. K. Toh, R. Kanesvaran, P. H. Tan, M. H. Tan, "A Multigene Assay Identifying Distinct Prognostic Subtypes of Clear Cell Renal Cell Carcinoma with Differential Response to Tyrosine Kinase Inhibition," *Eur Urol*, (2014) DOI: 10.1016/j.eururo.2014.06.041
20. Y. Zu, M.-H. Tan, B. Chowbay, S. C. Lee, H. Yap, M. T. M. Lee, L.-S. Lu, C.-P. Chang, J. Y. Ying, "Nanoprobe-Based Genetic Testing," *Nano Today*, (2014) DOI: 10.1016/j.nantod.2014.04.003
21. D. Y. C. Heng, T. K. Choueiri, B. I. Rini, J. Lee, T. Yuasa, S. K. Pal, S. Srinivas, G. A. Bjarnason, J. J. Knox, M. MacKenzie, U. N. Vaishampayan, M. H. Tan, S. Y. Rha, F. Donskov, N. Agarwal, C. Kollmannsberger, S. North and L. A. Wood., "Outcomes of Patients with Metastatic Renal Cell Carcinoma That Do Not Meet Eligibility Criteria for Clinical Trials," *Annals of Oncology*, 25 (2014) 149-154
22. N. Kroeger, W. Xie, J. L. Lee, G. A. Bjarnason, J. J. Knox, M. J. Mackenzie, L. Wood, S. Srinivas, U. N. Vaishamayan, S. Y. Rha, S. K. Pal, T. Yuasa, F. Donskov, N. Agarwal, C. K. Kollmannsberger, M. H. Tan, S. A. North, B. I. Rini, T. K. Choueiri and D. Y. Heng, "Metastatic Non-Clear Cell Renal Cell Carcinoma Treated with Targeted Therapy Agents: Characterization of Survival Outcome and Application of the International mRCC Database Consortium Criteria," *Cancer*, 119 (2013) 2999-3006
23. D. Y. C. Heng, W. Xie, M. M. Regan, L. C. Harshman, G. A. Bjarnason, U. N. Vaishampayan, M. MacKenzie, L. Wood, F. Donskov, M. H. Tan, S. Y. Rha, N. Agarwal, C. Kollmannsberger, B. I. Rini and T. Choueiri, "External Validation and Comparison with Other Models of the International Metastatic Renal-Cell Carcinoma Database Consortium Prognostic Model: A Population-Based Study," *Lancet Oncology*, 14 (2013) 141-148
24. M. Y. Al-Marrawi, B. I. Rini, L. C. Harshman, G. Bjarnason, L. Wood, U. Vaishampayan, M. MacKenzie, J. J. Knox, N. Agarwal, H. Al-Harbi, C. Kollmannsberger, M. H. Tan, S. Y. Rha, F. N. Donskov, S. North, T. K. Choueiri and D. Y. Heng, "The Association of Clinical Outcome to First-Line VEGF-Targeted Therapy with Clinical Outcome to Second-Line VEGF-Targeted Therapy in Metastatic Renal Cell Carcinoma Patients," *Targeted Oncology*, (2013) DOI 10.1007/s11523-012-0252-7
25. N. Kroeger, T. K. Choueiri, J.-L. Lee, G. A. Bjarnason, J. J. Knox, M. J. MacKenzie, L. Wood, S. Srinivas, U. N. Vaishamayan, S.-Y. Rha, S. K. Pal, T. Yuasa, F. Donskov, N. Agarwal, M.-H. Tan, A. Bamias, C. K. Kollmannsberger, S. A. North, B. I. Rini, D. Y. C. Heng, "Survival Outcome and Treatment Response of Patients with Late Relapse from Renal Cell Carcinoma in the Era of Targeted Therapy," *Eur Urol* (2013), <http://dx.doi.org/10.1016/j.eururo.2013.07.031>

26. I. Cima, C. W. Yee, F. S. Iliescu, W. M. Phy, K. H. Lim, C. Iliescu, M. H. Tan, "Label-Free Isolation of Circulating Tumor Cells in Microfluidic Devices: Current Research and Perspectives," *Biomicrofluidics*, 7 (2013) 011810-1 - 011810-16
27. E. Chiong, M. H. Tay, M. H. Tan, S. Kumar, H. G. Sim, B. T. Teh, R. Umbas, N. M. Chau, "Management of Kidney Cancer in Asia: Resource-Stratified Guidelines from the Asian Oncology Summit 2012," *The Lancet Oncology*, 13 (2012) e482-491
28. L.C. Harshman, W. Xie, G. Bjarnason, J.J. Knox, M. MackEnzie, L. Wood, S. Srinivas, U.N. Vaishampayan, M.H. Tan, S.Y. Rha, F. Donskov, A. Neeraj, C. Kollmannsberger, S. North S, B.I. Rini, D.Y.C. Heng, T.K. Choueiri, "Conditional Survival of Patients with Metastatic Renal-Cell Carcinoma Treated with VEGF-Targeted Therapy: A Population-Based Study," *Lancet Oncology*, 13 (2012) 927-935
29. Y. Cao, Z. L. Zhang, M. Zhou, P. Elson, B. Rini, H. Aydin, K. Feenstra, M. H. Tan, B. Berghuis, R. Tabbey, J. H. Resau, F. J. Zhou, B. T. The and C. N. Qian, "Pericyte Coverage of Differentiated Vessels Inside Tumor Vasculature is an Independent Unfavorable Prognostic Factor for Patients with Clear Cell Renal Cell Carcinoma," *Cancer*, (2012) DOI: 10.1002/cncr.27746
30. J. Y. Chan, H. Li, O. Singh, A. Mahajan, R. Ramasamy, K. Subramaniyan, R. Kanesvaran, H. G. Sim, T. W. Chong, Y. Y. Teo, S. E. Chia, M. H. Tan and B. Chowbay, "8q24 and 17q Prostate Cancer Susceptibility Loci in a Multiethnic Asian Cohort," *Urologic Oncology - Seminars and Original Investigations*, (2012) DOI:10.1016/j.urolonc.2012.02.009
31. S.J. Tan, W.T. Lim, M.H. Tan, C.T. Lim, "A Biomechanics-based Microfluidics Biochip for the Effective Label-free Isolation and Retrieval of Circulating Tumor Cells," *Biosensors and Biodetection Technologies for Cancer Detection, Diagnostics and Research 2011*, edited by Rasooly A and Herold K (2011), CRC Press
32. C.T. Lim, S.J. Tan, W.T. Lim, M.H. Tan, "Biomechanics Based Microfluidic Biochip for the Label-free Isolation and Retrieval of Circulating Tumour Cells," *European Journal of Cancer*, 47 (2011) S48
33. W.Y. Chay, W.S. Ong, P.H. Tan, N.Q. Leo, G.H. Ho, C.S. Wong, K.S. Chia, K.Y. Chow, M.H. Tan*, P.C. Ang*, "Validation of the Gail Model for Predicting Individual Breast Cancer Risk in a Prospective Nationwide Study of 28,104 Singapore Women," *Breast Cancer Res.*, 14 [1] (2012) R19 *Co-senior authors.
34. M.H. Tan, J. Mester, J. Ngeow, L. Rybicki, M.S. Orloff, C. Eng, "Lifetime Cancer Risks in Individuals with Germline PTEN Mutations" *Clin Cancer Res*, 18 [2] (2012) 400
35. L.S. Lee and M.H. Tan. "Predictive Models for the Practical Management of Renal Cell Carcinoma" *Nat Rev Urol*, 9 (2012) 73-84
36. D. Y. Heng, M. MacKenzie, U. Vaishampayan, J. J. Knox, G. A. Bjarnason, M. H. Tan, L. Wood, F. Donskov, C. Kollmannsberger, S. North, F. Donskov, B. I. Rini and T. K. Choueiri, "Primary Anti-Vascular Endothelial Growth Factor (VEGF)-Refractory Metastatic Renal Cell Carcinoma: Clinical Characteristics, Risk Factors and Subsequent Therapy," *The Annals of Oncology*, (2011) DOI: 10.1093/annonc/mdr533
37. A.S. Ooi, B.H. Wong, J.C. Wong, D. Petillo, M.H. Tan, Roosien D., V. Perrier-Trudova, Z. Zhang, X.J. Yang, M. Zhou, S. Richard, P.H. Tan, B.T. Teh and K.A. Furge, "An Antioxidant Response Phenotype is Shared between Hereditary and Sporadic Type 2 Papillary Renal Cell Carcinoma," *Cancer Cell*, 20 [4] (2011) 511-523
38. M.H. Tan, S. De, G. Bebek, M.S. Orloff, R. Wesolowski, E. Downs-Kelly, G.T. Budd, G.R. Stark, C. Eng, "Specific Kinesin Expression Profiles Associated With Taxane Resistance In Basal-Like Breast Cancer," *Breast Cancer Res Treat*, 131 [3] (2011) 849-858
39. M.H. Tan, C. Eng, "Testicular Microlithiasis: Recent Progress and Clinical Management," *Nat Rev Urol*, 8 [3] (2011) 153-63
40. M.H. Tan, J. Mester, C. Peterson, Y. Yang, J.L. Chen, L.A. Rybicki, K. Milas, H. Pederson, B. Remzi, M.S. Orloff, and C. Eng, "A Clinical Scoring System For Selection Of Patients For PTEN Mutation Testing Is Proposed On The Basis Of A Prospective Study Of 3042 Probands," *Am J Hum Genet*, 88 [1] (2011) 42-56
41. M.H. Tan, C.F. Wong, H.L. Tan, X.J. Yang, J. Ditlev, D. Matsuda, S.K. Khoo, J. Sugimura, T. Fujioka, K.A. Furge, E. Kort, S. Giraud, S. Ferlicot, P. Vielh, D. Amsellem-Ouazana, B.

- Debre, T. Flam, N. Thiounn, M. Zerbib, G. Benoit, S. Droupy, V. Molinie, A. Vieillefond, P.H. Tan, S. Richard, and B.T. Teh, "Genomic Expression And Single-Nucleotide Polymorphism Profiling Discriminates Chromophobe Renal Cell Carcinoma And Oncocytoma," *BMC Cancer*, 10 (2010) 196
42. M.H. Tan*, R. Kanesvaran*, H. Li, H.L. Tan, P.H. Tan, C.F. Wong, K.S. Chia, B.T. Teh, J. Yuen, and T.W. Chong, "Comparison Of The UCLA Integrated Staging System And The Leibovich Score In Survival Prediction For Patients With Nonmetastatic Clear Cell Renal Cell Carcinoma," *Urology*, 75 [6] (2010) 1365-1370; 1370 e1-3 *Co-first authors
43. I.B. Tan, K.K. Ang, B.C. Ching, C. Mohan, C.K. Toh, and M.H. Tan, "Testicular Microlithiasis Predicts Concurrent Testicular Germ Cell Tumors And Intratubular Germ Cell Neoplasia Of Unclassified Type In Adults: A Meta-Analysis And Systematic Review," *Cancer*, 116 [19] (2010) 4520-4532
44. J.M. Koeman*, R.C. Russell*, M.H. Tan*, D. Petillo, M. Westphal, K. Koelzer, J.L. Metcalf, Z. Zhang, D. Matsuda, K.J. Dykema, H.L. Houseman, E.J. Kort, L.L. Furge, R.J. Kahnoski, S. Richard, A. Vieillefond, P.J. Swiatek, B.T. Teh, M. Ohh, and K.A. Furge, "Somatic Pairing Of Chromosome 19 In Renal Oncocytoma Is Associated With Deregulated EGLN2-Mediated [Corrected] Oxygen-Sensing Response," *PLoS Genet*, 4 [9] (2008) e1000176 *Co-first authors
45. C. Greenman, P. Stephens, R. Smith, G.L. Dalgliesh, C. Hunter, G. Bignell, H. Davies, J. Teague, A. Butler, C. Stevens, S. Edkins, S. O'Meara, I. Vastrik, E.E. Schmidt, T. Avis, S. Barhorpe, G. Bhamra, G. Buck, B. Choudhury, J. Clements, J. Cole, E. Dicks, S. Forbes, K. Gray, K. Halliday, R. Harrison, K. Hills, J. Hinton, A. Jenkinson, D. Jones, A. Menzies, T. Mironenko, J. Perry, K. Raine, D. Richardson, R. Shepherd, A. Small, C. Tofts, J. Varian, T. Webb, S. West, S. Widaa, A. Yates, D.P. Cahill, D.N. Louis, P. Goldstraw, A.G. Nicholson, F. Brasseur, L. Looijenga, B.L. Weber, Y.E. Chiew, A. DeFazio, M.F. Greaves, A.R. Green, P. Campbell, E. Birney, D.F. Easton, G. Chenevix-Trench, M.H. Tan, S.K. Khoo, B.T. Teh, S.T. Yuen, S.Y. Leung, R. Wooster, P.A. Futreal, and M.R. Stratton, "Patterns Of Somatic Mutation In Human Cancer Genomes," *Nature*, 446 [7132] (2007) 153-158
46. K.A. Furge, M.H. Tan, K. Dykema, E. Kort, W. Stadler, X. Yao, M. Zhou, and B.T. Teh, "Identification Of Deregulated Oncogenic Pathways In Renal Cell Carcinoma: An Integrated Oncogenomic Approach Based On Gene Expression Profiling," *Oncogene*, 26 [9] (2007) 1346-1350
47. X.J. Yang*, M.H. Tan*, H.L. Kim, J.A. Ditlev, M.W. Betten, C.E. Png, E.J. Kort, K. Futami, K.A. Furge, M. Takahashi, H.O. Kanayama, P.H. Tan, B.S. Teh, C. Luan, K. Wang, M. Pins, M. Tretiakova, J. Anema, R. Kahnoski, T. Nicol, W. Stadler, N.G. Vogelzang, R. Amato, D. Seligson, R. Figlin, A. Belldegrun, C.G. Rogers, and B.T. Teh, "A Molecular Classification Of Papillary Renal Cell Carcinoma," *Cancer Res*, 65 [13] (2005) 5628-5637 *Co-first authors
48. M.H. Tan, C. Morrison, P. Wang, X. Yang, C.J. Haven, C. Zhang, P. Zhao, M.S. Tretiakova, E. Korpi-Hyovalti, J.R. Burgess, K.C. Soo, W.K. Cheah, B. Cao, J. Resau, H. Morreau, and B.T. Teh, "Loss Of Parafibromin Immunoreactivity Is A Distinguishing Feature Of Parathyroid Carcinoma," *Clin Cancer Res*, 10 [19] (2004) 6629-6637
49. M.H. Tan, C.G. Rogers, J.T. Cooper, J.A. Ditlev, T.J. Maatman, X. Yang, K.A. Furge, B.T. Teh, "Gene Expression Profiling Of Renal Cell Carcinoma," *Clin Cancer Res*, 10 (2004) 6315-6321

Patent:

1. Teh Bin Tean, Tan Min-Han, "Microarray gene expression profiling in subtypes of clear cell renal cell carcinoma," PCT/US2005/016889, WO 2006/124022, 23 Nov 2006
2. Teh Bin Tean, Tan Min-Han, "Microarray gene expression profiling in classes of papillary renal cell carcinoma," PCT/US2005/013260, WO 2006/112842, 26 Oct 2006
3. Teh Bin Tean, Tan Min-Han, Cao Boliang, Resau James H, Zhao Ping, Zhang Chun. "Antibody specific for parafibromin, a new marker of parathyroid carcinoma," PCT/US2005/010442, WO 2006/112867, 28 March 2005.
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