

## Publications

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### Peer reviewed publications:

Tabaglio, T., Low, D.H.P., Koon, W.L.T., Goy, P.A., Cywoniuk, P., Wollmann, H., Ho, J., Tan, D., Aw, J., Pavesi, A., Sobczak, K., Wee, D.K.B., Guccione, E.  
MBNL1 alternative splicing isoforms play opposing roles in cancer.  
***Life Sci. Alliance*** (2018) 1, e201800157.

Georgilis, A., Klotz, S., Hanley, J.H., Herranz, N., Weirich, B., Morancho, B., Leote, A.C., D'Artista, L., Gallage, S., Seehawer, M., Carroll, T., Dharmalingam, G., Wee, K.B., Mellone, M., Pombo, J., Heide, D., Guccione, E., Arribas, J., Barbosa-Morais, N.L., Heikenwalder, M., Thomas, G.J., Zender, L., Gil, J.  
PTBP1-Mediated Alternative Splicing Regulates the Inflammatory Secretome and the Pro-Tumorigenic Effects of Senescent Cells.  
***Cancer Cell*** (2018) 34, 85-102.

Do, D.V., Strauss, B., Cukuroglu, E., Macaulay, I., Wee, K.B., Hu, T.X., Igor, R.D.L.M., Lee, C., Harrison, A., Butler, R., Dietmann, S., Ule, J., Marioni, J., Smith, C., Göke, J., Surani, M.A.  
SRSF3 maintains transcriptome integrity in oocytes by regulation of alternative splicing and transposable elements.  
***Cell Discovery*** (2018) 4, 33.

Lin, J., Lee, J.H.J., Paramasivam, K., Pathak, E., Wang, Z., Pramono, Z.A.D., Lim, B., Wee, K.B.\*, Surana, U.\*  
Induced-Decay of Glycine Decarboxylase Transcripts as an Anticancer Therapeutic Strategy for Non-Small-Cell Lung Carcinoma.  
***Mol. Ther.: Nucleic Acids*** (2017) 9, 263–273.

Toh, C.X., Chan, J.W., Chong, Z.S., Farran, C.A.E., Wang, H.F., Guo, H.C., Ma, D., Satapathy, S., Goh, G.Y.L., Khattar, E., Yang, L., Tergaonkar, V., Chang, Y.T., Collins, J.J., Daley, G.Q., Wee, K.B., Li, H., Lim, Y.P., Bard, F.A., Loh, Y.H.  
RNAi Reveals Phase-Specific Global Regulators of Human Somatic Cell Reprogramming.  
***Cell Rep.*** (2016) 15, 2597–2607.

Wee, K.B.\*#, Lee, R.T.C.#, Lin, J., Pramono, Z.A.D., Maurer-Stroh, S.  
Discovery of Influenza A Virus Sequence Pairs and Their Combinations for Simultaneous

Heterosubtypic Targeting that Hedge against Antiviral Resistance.

**PLoS Comput. Biol.** (2016) 12, e1004663.

Koh, C.M., Bezzi, M., Low, D.H.P., Ang, W.X., Teo, S.X., Gay, F.P.H., Al-Haddawi, M., Tan, S.Y., Osato, M., Sabò, A., Amati, B., Wee, K.B., Guccione, E.

MYC regulates the core pre-mRNA splicing machinery as an essential step in lymphomagenesis.

**Nature** (2015) 523, 96–100.

Pao, P.W., Wee, K.B., Yee, W.C., Pramono, Z.A.D.

Dual masking of specific negative splicing regulatory elements resulted in maximal exon 7 inclusion of *SMN2* gene.

**Mol. Ther.** (2014) 22, 854–861.

Pramono, Z.A.#, Wee, K.B.#, Wang, J.L., Chen, Y.J., Xiong, Q.B., Lai, P.S., Yee, W.C.

A prospective study in the rational design of efficient antisense oligonucleotides for exon skipping in DMD gene.

**Hum. Gene Ther.** (2012) 23, 781–790.

Wee, K.B.\*, Yio, W.K., Surana, U., Chiam, K.H.

Transcription factor oscillations induce differential gene expressions.

**Biophys. J.** (2012) 102, 2413–2423.

Wee, K.B., Surana, U., Aguda, B.D.

Oscillations of the p53-Akt network: implications on cell survival and death.

**PLoS One** (2009) 4, e4407.

Wee, K.B., Pramono, Z.A., Wang, J.L., MacDorman, K.F., Lai, P.S., Yee, W.C.

Dynamics of co-transcriptional pre-mRNA folding influences the induction of dystrophin exon skipping by antisense oligonucleotides.

**PLoS One** (2008) 3, e1844.

Wee, K.B., Aguda, B.D.

Akt versus p53 in a network of oncogenes and tumor suppressor genes regulating cell survival and death.

**Biophys. J.** (2006) 91, 857–865.

Goryachev, A.B., Toh, D.J., Wee, K.B., Lee, T., Zhang, H.B., Zhang, L.H.  
Transition to quorum sensing in an Agrobacterium population: A stochastic model.  
***PLoS Comput. Biol.*** (2005) 1, e37.

Patents filed:

Wee, K.B.  
Method For Screening Splicing Variants Or Events.  
**WO 2019/032054 A1.**

Guccione, E., Wee, K.B., Bertolotti, A.  
Modifying T lymphocytes function with Antisense Oligonucleotides (ASOs) for personalized immune therapy.  
**SG Patent Application No.: 10201705285S.**  
*Exclusive licensed on 14 Sep 2018.*

Surana, U., Wee, K.B., Lin, J., Lim, B.  
Steric hindrance antisense oligonucleotides (shAONs) targeting glycine decarboxylase (GLDC) expression as drug candidates for non-small cell lung carcinoma (NSCLC) and other cancers.  
**SG Patent Application No.: 10201609048R.**

Guccione, E., Wee, K.B.  
Method of Treating Cancer by Antisense Oligonucleotide Targeting PRDM15.  
**WO 2018/044239.**

Pramono, Z.A., Yee, W.C., Lai, P.S., Wee, K.B.  
Antisense oligonucleotides and uses thereof.  
**WO 2011/078,797.**

Trade-secrets lodged:

Wee, K.B.  
Methods for the rational design of highly efficacious steric hindrance antisense oligonucleotides (stAONs) for the specific modulations of RNA.  
**IHPC/Z/09979 (2017).**

Wee, K.B., Pramono, Z.A., Lee, R.T.C., Surana, U., Yio, W.K., Maurer-Stroh, S..  
An Integrated High-Throughput Technology Platform for the Systematic Selection of Exon  
Targets and for the Rational Design of Efficacious Antisense Oligonucleotides in Exon  
Splicing Modulation.

**IHPC/Z/07462 (2012).**

Wee, K.B., Pramono, Z.A., Yee, W.C.

Methodology for the rational design of efficient AONs to induce specific exon skipping.

**IHPC/Z/06180 (2010).**

Wee, K.B., Pramono, Z.A., Lee, R.T.C.

Enabling platform for AON target identification and guided-design of efficient AON molecules  
for disease therapy and biological research.

**IHPC/Z/06065 (2010).**